



## ecology and environment, inc.

101 YESLER WAY, SEATTLE, WASHINGTON, 98104, TEL. 206/624-9537

International Specialists in the Environment

PASSF  
1.4v1  
1/22/90

January 22, 1990

Carl G. Kitz

Environmental Protection Agency  
1200 Sixth Avenue, HW-113  
Seattle, WA 98101

Ref: TDD T10-8910-019

Dear Carl:

Enclosed please find the trip report and the Potential Hazardous Waste Site Identification Form for the Pasco Sanitary Landfill (PSL) site assessment.

The contaminant migration pathway of concern at PSL is the groundwater pathway. Since the groundwater gradient in the area of the site tends to the southwest and homes to the southwest of PSL are on Pasco city water supply, a removal action at PSL is not warranted.

The groundwater monitoring program in place at this time monitors contamination in close proximity to the site; however, off-site contamination migration is undefined. To adequately track the off-site migration of contaminants, the installation of several down gradient monitoring wells and on expanded monitoring program may be warranted.

Several drinking water wells located approximately one mile to the south of PSL were sampled in 1987. Estimated analytical results of one drinking water well sample indicated volatile organic contamination at low levels. Any connection between PSL and this drinking water well at this time would be tentative due to the lack of wells in a southerly direction from the site. Drinking water wells located in close proximity to PSL have not been sampled since 1987.

Sincerely,

Richard W. Fullner *for RWF*  
TAT Leader

PVW/thl

Enclosure





## ecology and environment, inc.

101 YESLER WAY, SEATTLE, WASHINGTON, 98104, TEL. 206/624-9537

International Specialists in the Environment

### TRIP REPORT

DATE: December 29, 1989  
TO: Richard Fullner, TATL, E & E, Seattle, WA  
FROM: Peter Witt, E & E, Seattle, WA *PW*  
SUBJ: Pasco Landfill Site Assessment, Pasco, WA  
REF: TDD T10-8910-019

#### Place Visited:

Pasco Sanitary Landfill  
Pasco, Washington

#### Purpose of Trip:

To conduct a site assessment at Pasco Sanitary Landfill to determine the need for removal actions.

#### Persons Making Trip:

Peter Witt, TAT-Petroleum Engineer  
Rebekah Nordquist, TAT-Environmental Scientist  
Ecology and Environment, Inc., Seattle, WA (206) 624-9537

#### Persons Contacted:

Larry Kamberg  
Benton-Franklin District Health Department (509) 934-2614

John Zillich  
Technico & Enviro Services Co., (509) 735-7283

Larry Dietrich, Owner and Operator  
Pasco Sanitary Landfill (509) 735-7283

#### Date of Trip:

November 11, 1989

## BACKGROUND

On October 23, 1989, the Region X U.S. Environmental Protection Agency tasked the Region 10 Technical Assistance Team (TAT) to conduct a site assessment at the Pasco Sanitary Landfill in Pasco, Washington (Figure 1).

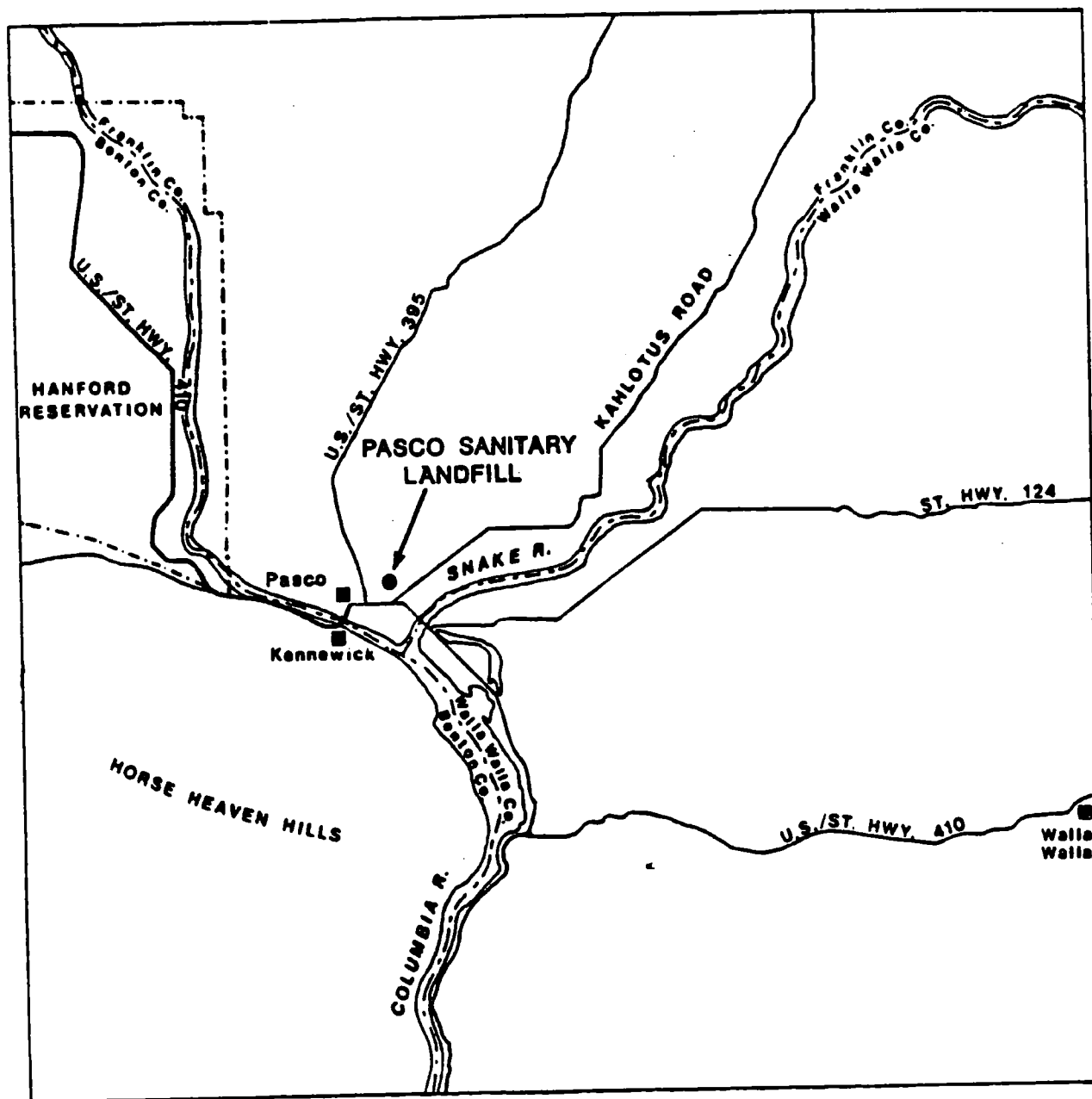
Resource Recovery Corporation leased a portion of the Pasco Sanitary Landfill (PSL) in 1972 and operated this area as a regional hazardous waste disposal site until December 1974. The site accepted hazardous wastes from several sources (Ecology and Environment, Inc. 1984).

A summary of previous environmental investigations is presented in Table 1. As can be seen in Table 1, several past investigation efforts have taken the groundwater pathway into account and have drilled and sampled on-site monitoring wells (Figure 2), and sampled off-site drinking water and irrigation supply wells. Results of these investigations show that three on-site monitoring wells are contaminated with organic compounds at low levels. Out of seven off-site drinking water wells and one on-site water supply well sampled, one drinking water well also showed volatile organic contamination. Analytical results of the Bonnie Brae well sample (collected in 1987) identified 1,1-dichloroethane and tetrachloroethene at estimated concentrations of 2.1 ug/l and 2.6 ug/l, respectively. The estimated concentration for tetrachloroethene (2.6 ug/l) did not exceed the draft maximum contaminant level of 5 ug/l; a standard is not available for 1,1-dichloroethane (40 CFR 141). It should be noted that these drinking water wells are located in a southerly direction from PSL, and the groundwater gradient in the area is oriented to the southwest (Ecology and Environment, Inc. 1987).

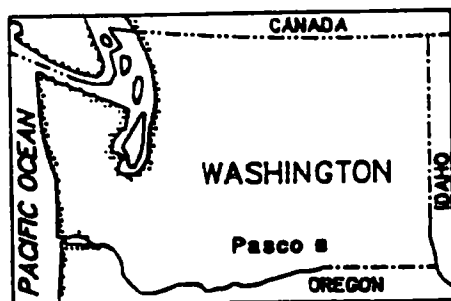
## TAT ACTIONS

Upon completion of a thorough CERCLIS file review, the TAT met with Larry Dietrich (owner and operator of Pasco Sanitary Landfill), John Zillich (Technico and Enviro Services Co.) and Larry Kamberg (Benton Franklin District Health) on November 11, 1989, to obtain up-to-date information on PSL. According to John Zillich, a groundwater sampling program has been in place since March 1987. Table 2 presents the PSL groundwater sampling schedule and analytical parameters. John Zillich also made available to TAT last years groundwater analytical results (Appendix A). Analytical results indicate that the greatest concentration of organic contaminants was found in Well EE-3. Table 3 presents a summary of organic groundwater monitoring results of monitoring Well EE-3 from November 1988 to September 1989.

Following the meeting the TAT, Larry Dietrich, John Zillich, and Larry Kamberg went on site (Photographic Documentation: Appendix B). TAT observed a large scrap metal pile (photo #5) and several empty drums on site; no full drums or tanks were noted on site.



0 5 10 20  
scale in miles



ecology & environment, inc.	
JOB: T10-8910-019	SITE ID: WA0280
DRAWN BY: P. WITF	DATE: 12/12/89

**FIGURE 1**  
**LOCATION MAP**  
**PASCO SANITARY LANDFILL**  
**Pasco, WA**



TABLE 1

**SUMMARY OF ENVIRONMENTAL INVESTIGATIONS  
PASCO SANITARY LANDFILL, PASCO, WASHINGTON**

Year	Investigator	Major Activities	Conclusions
1973	WA Dept. of Ecology	<ul style="list-style-type: none"> <li>o Site visit and interviews</li> <li>o File reviews</li> </ul>	<ul style="list-style-type: none"> <li>o Location appropriate for disposal of industrial solid wastes</li> <li>o Liquid waste disposal inappropriate due to shallow water table</li> <li>o Permit issued for landfill to accept potentially hazardous wastes; permit life 1973-1974</li> </ul>
1982 - 1983	J-U-B Engineers	<ul style="list-style-type: none"> <li>o Six monitoring wells installed under a subcontract from PSL/RRC</li> <li>o Quarterly sampling for TCL inorganics and cyanide</li> </ul>	<ul style="list-style-type: none"> <li>o Analytical results below EPA allowable contaminant levels</li> <li>o Quarterly monitoring to continue under Ecology order</li> </ul>
1984	E&E/EPA	<ul style="list-style-type: none"> <li>o Site visit and interviews</li> <li>o Three ground water samples collected; analyzed for TCL organic and inorganic compounds</li> </ul>	<ul style="list-style-type: none"> <li>o No evidence of organic contamination in on-site monitoring wells</li> <li>o Upgradient (control) well exhibited higher levels of inorganics than downgradient wells</li> <li>o General increase in contaminant levels over previous sampling results</li> </ul>
1985	E&E/EPA	<ul style="list-style-type: none"> <li>o Nine additional on-site wells installed including one new control well</li> <li>o Ground water and soil samples collected</li> </ul>	<ul style="list-style-type: none"> <li>o Evidence of on-site ground water contamination by organic compounds</li> <li>o Significant increases of inorganic levels over previous sampling</li> <li>o Potential off-site migration</li> </ul>
1986	EPA	<ul style="list-style-type: none"> <li>o Eight drinking water wells sampled (1 mile downgradient)</li> <li>o Three on-site monitoring wells sampled</li> <li>o One irrigation well sampled (about 1/4 mile downgradient)</li> </ul>	<ul style="list-style-type: none"> <li>o Low level organics detected in several monitoring, drinking water, and the irrigation well; all levels below drinking water standards</li> <li>o Anomalous inorganic data in on-site monitoring wells attributed to siltation in wells and use of different sampling techniques between various investigations</li> <li>o More data needed to identify sources of contaminants; resampling planned to ensure levels in drinking water wells remain safe</li> </ul>
1987	EPA	<ul style="list-style-type: none"> <li>o On-site ground water elevation survey</li> <li>o Thirteen on-site monitoring wells sampled</li> <li>o Seven off-site and the on-site drinking water wells sampled</li> </ul>	<ul style="list-style-type: none"> <li>o Volatile organics detected in two on-site monitoring wells</li> <li>o Volatile organics detected in one drinking water well, but levels below drinking water standards</li> </ul>

EPA = Environmental Protection Agency  
 PSL = Pasco Sanitary Landfill  
 RRC = Resource Recovery Corporation

TCL = Target Compound List  
 E&E = Ecology and Environment, Inc.

Source: Ecology and Environment, Inc. 198

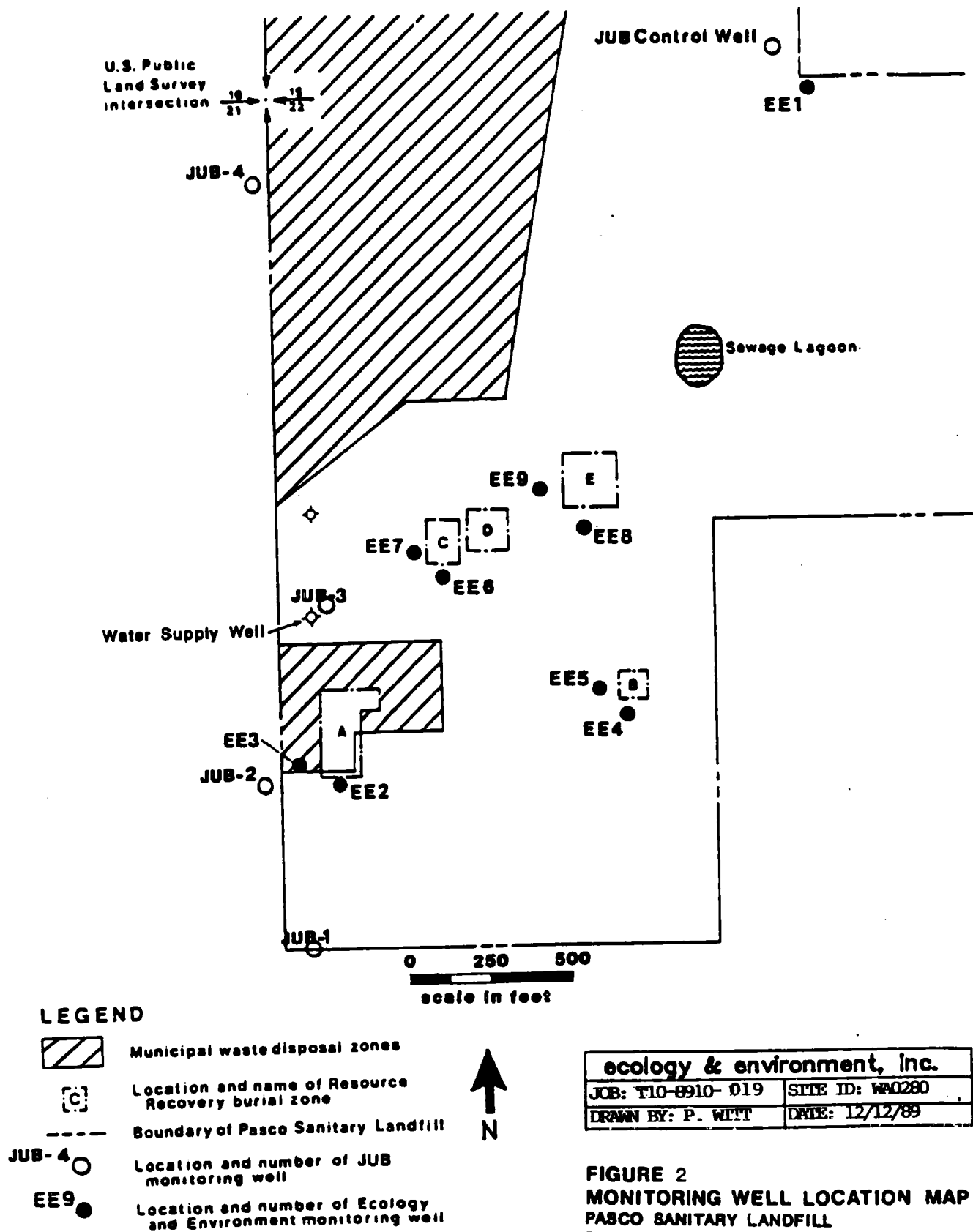


TABLE 2

**GROUNDWATER MONITORING ANALYTICAL REQUIREMENTS  
PASCO SANITARY LANDFILL, PASCO, WASHINGTON**

Well Location	Solvents *	Total Fe Mn Cu Ba	Herbicides 2,4-D 2,4,5-T 2,4,5-TP	MFS ** Parameters	Static Water Level
JUB Control	1/Qtr.	1/Qtr.		1/Qtr.	1/Qtr.
JUB2	1/Qtr.	1/Qtr.		1/Qtr.	1/Qtr.
EE3	1/Qtr.	1/Qtr.	1/Yr.	1/Qtr.	1/Qtr.
JUB4	1/Qtr.	1/Qtr.		1/Qtr.	1/Qtr.
EE2	1/Qtr.	1/Qtr.	1/Yr.		1/Qtr.
EE1	1/Qtr.	1/Qtr.			1/Qtr.
EE4	1/Qtr.	1/Qtr.	1/Yr.		1/Qtr.
EE5	1/Qtr.	1/Qtr.			1/Qtr.
EE6	1/Qtr.	1/Qtr.			1/Qtr.
EE7	1/Qtr.	1/Qtr.			1/Qtr.
EE8	1/Qtr.	1/Qtr.			1/Qtr.
Water Supply	1/Qtr.	1/Qtr.			1/Qtr.
JUB1					1/Qtr.
JUB3					1/Qtr.

Source: Technico & Enviro Serrvices, December 1989, Pasco, Washington

\*Organic Solvent

1,1-Dichloroethylene  
1,1-Dichloroethane  
Trichloroethylene  
Chloroform  
1,1,1-Trichloroethane  
Trichloroethylene  
Tetrachloroethylene  
Toluene  
Total Xylene  
Vinyl Chloride

\*\*Minimum Functional  
Standard Contaminants

Temperature  
Conductivity  
pH  
Chloride  
Nitrate, Nitrite, and Ammonia as Nitrogen  
Sulfate  
Dissolved Iron  
Dissolved Zinc and Manganese  
Chemical Oxygene Demand  
Total Organic Carbon

TABLE 3  
SUMMARY OF ORGANIC GROUNDWATER MONITORING RESULTS  
WELL EE-3  
PASCO SANITARY LANDFILL  
PASCO, WASHINGTON ug/l (ppb)

	<u>November 23, 1988</u>	<u>March 20, 1989</u>	<u>June 3, 1989</u>	<u>September 28, 1989</u>
Vinyl Chloride	<5	<2	7.82	13.6
1,1-Dichloroethylene	18	NA	120.0	216.0
1,1-Dichloroethane	130	70	213.0	380.0
Chloroform	44	10	35.0	63.0
1,1,1-Trichloroethane	291	1000	591.0	1093.0
Trichloroethylene	112	1100	684.0	1035.0
Tetrachloroethylene	9	60	45.2	102.0
Total Xylenes	85	200	477.0	712.0
Toluene	NA	NA	996.0	2100.0

NA - Not Analyzed

## **CONCLUSION**

The groundwater monitoring program in place at this time is currently monitoring contaminant migration in close proximity to the site. However, the location of the contaminant plume off site is not known due to the lack of wells further downgradient of the JUB or E & E installed monitoring wells. Also, there are no nearby drinking water wells southwest (groundwater gradient direction) of the site; homes in that direction are on city water supply (Zillich 1989).

## REFERENCES

Ecology and Environment, Inc., 1984, Final Report For Resource Recovery Corporation, Pasco, Washington, EPA TDD #R10-8410-14.

Ecology and Environment, Inc., 1987, Field Investigation Report for Pasco Sanitary Landfill/Resource Recovery Corporation, Pasco, Washington, EPA TDD #F10-8701-04.

Zillich, John, November 14, 1989, Environmental Consultant, Technico and Enviro Services Co., Pasco, Washington, Personal Communication with Peter Witt, Ecology and Environment, Inc.

APPENDIX A  
GROUNDWATER MONITORING DATA



**Technico & Enviro Services Co.**

Project E  
File

(509) 735-7283

Suite 33

1776 Fowler

Richland, WA 99352

October 30, 1989

Mr. Cris Matthews  
Solid Waste Coordinator  
Environmental Quality Div.  
Washington Dept. of Ecology  
N. 461 Monroe Street, Suite 100  
Spokane, WA 99205-1295

Subject: **Groundwater Monitoring Results at the Pasco  
Sanitary Landfill**

Dear Mr. Matthews:

This letter provides you with the water quality monitoring results for wells requiring annual sampling plus the routine 3rd quarter sampling results.

Sincerely,

  
John A. Zillich

JAZ:tg

enclosures

cc: Larry Dietrich  
Larry Kamberg



**ANALYTICAL  
RESOURCES  
INCORPORATED**

Analytical  
Chemists &  
Consultants

333 Ninth Ave. North  
Seattle, Wa 98109-5187  
(206) 621-6490

# ORGANICS ANALYSIS DATA SHEET - METHOD 8150

Lab Sample ID: 1004MB  
Matrix: Water

Client Sample ID : Method Blank  
Client: Technical Env. Services  
Project No: 88-21  
VTSP: 10/03/89

Date Extracted: 10/4/89  
Date Analyzed: 10/11/89  
Volume Extracted: 100 ml.  
Conc/Dil Factor: 1 to 5

Data Release Authorized: *Peter M. Hughes*  
Report prepared on MAC:C C.P.G. 10/25/89

CAS Number		µg/L
93-72-1	Silvex (2,4,5-TP)	0.2 U
93-76-5	2,4,5-T	2.0 U
88-85-7	Dinoseb	0.4 U
1918-00-9	Dicamba	0.3 U
120-36-5	Dichlorprop	1.0 U
94-75-7	2,4-D	2.0 U
94-82-6	2,4-DB	2.0 U
75-99-0	Dalapon	40 U
7085-19-0	MCP	250 U
94-74-6	MCPA	NA

## \* Herbicide Surrogate Recovery

2,3-Dichlorophenoxyacetic acid	95 %
--------------------------------	------

## Data Qualifiers

- U Indicates compound was analyzed for but not detected at the given detection limit.
- J Indicates an estimated value when the result is less than the calculated detection limit.
- NA Indicates compounds were not analyzed for.



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**ORGANICS ANALYSIS DATA SHEET - METHOD 8150**

Lab Sample ID: 3774 D  
Matrix: Water

Client Sample ID : EE5  
Client: Technical Env. Services  
Project No: 88-21  
VTSR: 10/03/89

Date Extracted: 10/4/89  
Date Analyzed: 10/11/89  
Volume Extracted: 100 ml.  
Conc/Dil Factor: 1 to 5

Data Release Authorized: 

Report prepared on MAC:C C.P.G. 10/25/89

CAS Number		ug/L
93-72-1	Silvex (2,4,5-TP)	0.2 U
93-76-5	2,4,5-T	2.0 U
88-85-7	Dinoseb	0.4 U
1918-00-9	Dicamba	0.3 U
120-36-5	Dichlorprop	1.0 U
94-75-7	2,4-D	2.0 U
94-82-6	2,4-DB	2.0 U
75-99-0	Dalapon	40 U
7085-19-0	MCP	250 U
94-74-6	MCPA	NA

**\* Herbicide Surrogate Recovery**

2,3-Dichlorophenoxyacetic acid	109%
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**Data Qualifiers**

- U Indicates compound was analyzed for but not detected at the given detection limit.
- J Indicates an estimated value when the result is less than the calculated detection limit.
- NA Indicates compounds were not analyzed for.



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**ORGANICS ANALYSIS DATA SHEET - METHOD 8150**

Lab Sample ID: 3774 A  
Matrix: Water

Client Sample ID : EE2  
Client: Technical Env. Services  
Project No: 88-21  
VTSR: 10/03/89

Date Extracted: 10/4/89  
Date Analyzed: 10/11/89  
Volume Extracted: 100 ml.  
Conc/Dil Factor: 1 to 5

Data Release Authorized: 

Report prepared on MAO:O O.P.G. 10/25/89

CAS Number		ug/L
93-72-1	Silvex (2,4,5-TP)	0.2 U
93-76-5	2,4,5-T	2.0 U
88-85-7	Dinoseb	0.4 U
1918-00-9	Dicamba	0.3 U
120-36-5	Dichlorprop	1.0 U
94-75-7	2,4-D	2.0 U
94-82-6	2,4-DB	2.0 U
75-99-0	Dalapon	40 U
7085-19-0	MCPP	250 U
94-74-6	MCPA	NA

**\* Herbicide Surrogate Recovery**

2,3-Dichlorophenoxyacetic acid	112%
--------------------------------	------

**Data Qualifiers**

- U Indicates compound was analyzed for but not detected at the given detection limit.
- J Indicates an estimated value when the result is less than the calculated detection limit.
- NA Indicates compounds were not analyzed for.



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# **ORGANICS ANALYSIS DATA SHEET - METHOD 8150**

Lab Sample ID: 3774 B  
Matrix: Water

Client Sample ID : EE3  
Client: Technical Env. Services  
Project No: 88-21  
VTSR: 10/03/89

Date Extracted: 10/4/89  
Date Analyzed: 10/11/89  
Volume Extracted: 100 ml.  
Conc/Dil Factor: 1 to 5

Data Release Authorized: Peter M. Legler

Report prepared on MAC:G C.P.G. 10/25/89

CAS Number		µg/L
93-72-1	Silvex (2,4,5-TP)	0.2 U
93-76-5	2,4,5-T	2.0 U
88-85-7	Dinoseb	0.4 U
1918-00-9	Dicamba	0.3 U
120-36-5	Dichlorprop	1.0 U
94-75-7	2,4-D	2.0 U
94-82-6	2,4-DB	2.0 U
75-99-0	Dalapon	40 U
7085-19-0	MCP	250 U
94-74-6	MCPA	NA

## **\* Herbicide Surrogate Recovery**

2,3-Dichlorophenoxyacetic acid	113%
--------------------------------	------

## **Data Qualifiers**

- U Indicates compound was analyzed for but not detected at the given detection limit.
- J Indicates an estimated value when the result is less than the calculated detection limit.
- NA Indicates compounds were not analyzed for.



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**ORGANICS ANALYSIS DATA SHEET - METHOD 8150**

Lab Sample ID: 3774 C  
Matrix: Water

Client Sample ID : EE4  
Client: Technical Env. Services  
Project No: 88-21  
VTSR: 10/03/89

Date Extracted: 10/4/89  
Date Analyzed: 10/11/89  
Volume Extracted: 100 ml.  
Conc/Dil Factor: 1 to 5

Data Release Authorized: *Peter M. Legler*  
Report prepared on MAC:C C.P.G. 10/25/89

CAS Number		µg/L
93-72-1	Silvex (2,4,5-TP)	0.2 U
93-76-5	2,4,5-T	2.0 U
88-85-7	Dinoseb	0.4 U
1918-00-9	Dicamba	0.3 U
120-36-5	Dichlorprop	1.0 U
94-75-7	2,4-D	2.0 U
94-82-6	2,4-DB	2.0 U
75-99-0	Dalapon	40 U
7085-19-0	MOPP	250 U
94-74-6	MCPA	NA

**\* Herbicide Surrogate Recovery**

2,3-Dichlorophenoxyacetic acid	109%
--------------------------------	------

**Data Qualifiers**

- U Indicates compound was analyzed for but not detected at the given detection limit.
- J Indicates an estimated value when the result is less than the calculated detection limit.
- NA Indicates compounds were not analyzed for.

					GROUND WATER			
SITE: PASCO					DATA SHEET			
DATE: 9/89								
WELL NO.	DATE	MEASURED AT	TOP OF CASING ELEVATION	DEPTH TO WATER	GROUND WATER ELEVATION	SPEC COND	pH	TEMP C
JOB CONTROL	9/28/89	TOP OF PVC	411.6	54.80	356.80	608	7.45	18.9
JOB 1	9/29/89	TOP OF PVC	417.1	70.00	347.10			
JOB 2	9/28/89	HOLE IN CAP	408.3	60.98	347.33	665	6.8	17.4
JOB 3	9/29/89	TOP OF PVC	420.4	74.23	346.17			
JOB 4	9/28/89	TOP OF PVC	393.7	41.75	351.95	665	7.3	17.4
IE 1	9/29/89	TOP OF PIPE	417.2	60.26	356.94			
IE 2	9/28/89	HOLE IN CAP	418.9	67.29	351.58		6.9	17.3
IE 3	9/28/89	HOLE IN CAP	416.8	64.80	351.97	829	6.7	19.0
IE 4	9/29/89	TOP OF PIPE	397.6	45.02	352.58			
IE 5	9/29/89	TOP OF PIPE	407.9	56.50	351.40			
IE 6	9/29/89	TOP OF PIPE	427.0	74.24	352.76			
IE 7	9/29/89	TOP OF PIPE	425.6	73.43	352.17			
IE 8	9/29/89	TOP OF PIPE	428.4	74.64	353.76			





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Consultants

333 Ninth Ave. North  
Seattle, Wa 98109-5187  
(206) 621-6490

10 October, 1989

John Zillie  
Technical Enviromental Services  
1776 Fowler Suite 33  
Richland, WA 99352

**RE: Project ID:88-4; Samples submitted for TOC analysis;  
ARI Job No. 3775.**

Dear Mr. Zillie:

Please find enclosed the TOC data for the above referenced project.

If you have any questions or require additional information, please do not  
hesitate to call at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Catherine P. Greer  
Project Coordinator

cpg

enclosures  
cc: file #03775



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333 Ninth Ave. North  
Seattle, Wa 98109-5187  
(206) 621-6490

**ORGANICS ANALYSIS DATA SHEET - Method 9060**

Matrix: Waters

Project: 88-4  
QC Report No: 3775-T.E.S.  
Date Received: 10/03/89

Data Release Authorized: Bryan D. Anderson  
Report Prepared 10/10/89 - MAC:C C.P.G.

Date of Analysis: 10/04/89

Lab ID	Sample No	Dilution Factor	Detected ppm C $\pm$ Std Dev	% SD	TOC (ppm C) dil*ppm detected
1 Blank #1	System Blank#1	1	0.187 $\pm$ 0.019	10	0.2
2 Blank #2	System Blank#2	1	0.171 $\pm$ 0.020	12	0.2
3 3775 A	EE2	1	1.26 $\pm$ 0.069	5.5	1.3
4 3775 B	EE3	1	1.87 $\pm$ 0.075	4.0	1.9
5 3775 C	JUB Control	1	1.61 $\pm$ 0.105	6.5	1.6
6 3775 D	JUB-4	1	1.66 $\pm$ 0.115	6.9	1.7

QA/QC Runs:			Detected ppm C $\pm$ Std Dev	% SD
Cali Check #1	5.0 ppm KHP#1	1	4.85 $\pm$ 0.175	3.6
Cali Check #2	5.0 ppm KHP#2	1	4.73 $\pm$ 0.242	5.1

Calibration: One 5.0 ppm C calibration  
run each 15 samples  
[Potassium Hydrogen Phthalate]

Analysis performed with a Dohrman DC180 Analyzer  
in non-Purgeable Organic Carbon Mode,  
using the persulfate-UV oxidation method.

QA/QC: One "Cold Blank" and one  
system blank per calibration

Ten mls of sample is acidified with phosphoric acid and  
purged for 10 minutes. Four 1.0 ml aliquots of each  
sample are analyzed, and the average and standard  
deviation reported for each sample.

# ALCHEM LABORATORY

104 West 31st Street  
Boise, Idaho 83714  
(208) 336-1172

## LABORATORY REPORT

TECHNICO AND ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

ATTENTION: JOHN ZILlich  
SOURCE -: JUB CONTROL

DATE COLLECTED - - -09/28/89  
TIME COLLECTED - - -  
DATE RECEIVED - - - 09/29/89  
DATE REPORTED - - - 10/13/89  
SUBMITTED : JOHN ZILlich

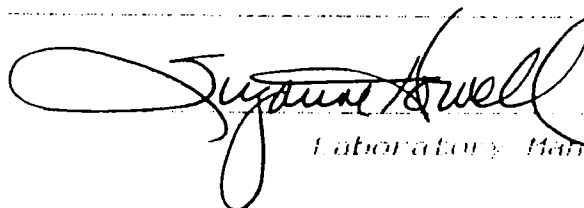
LAB SAMPLE NUMBER - 10588

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
TOTAL COLIFORM	** <1	09/29/89	KS
CHEMICAL OXYGEN DEMAND	<5.0	10/05/89	KS
CHLORIDE	26.2	09/29/89	DM
NITRATE as N	6.96	09/29/89	DM
SULFATE	63.2	09/29/89	DM
CONDUCTIVITY (umhos/cm)	608.0	10/10/89	JR
AMMONIA as N	<0.05	10/13/89	KS
BARIUM	<0.1	10/04/89	DM
COPPER	<0.01	10/10/89	SH
IRON	0.15	10/10/89	SH
MANGANESE	0.01	10/10/89	SH
IRON (DISS.)	0.02	10/10/89	SH
MANGANESE (DISS.)	<0.01	10/10/89	SH
ZINC (DISS.)	0.032	10/10/89	SH

COMMENTS: \*\* NO COLIFORM BACTERIA WERE FOUND ON CULTURE PLATE.  
NITRITE as N - -: <0.5

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Laboratory Manager

# ALCHEM LABORATORY

104 West 31st Street  
Boise, Idaho 83714  
(208) 336-1172

## LABORATORY REPORT

TECHNICO AND ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

ATTENTION: JOHN ZILlich  
SOURCE -: JUB 4

DATE COLLECTED - - -09/28/89  
TIME COLLECTED - - -9:40 AM  
DATE RECEIVED - - - 09/29/89  
DATE REPORTED - - - 10/13/89  
SUBMITTED : JOHN ZILlich

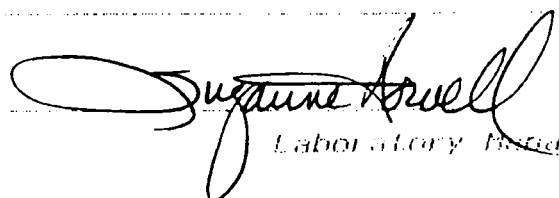
LAB SAMPLE NUMBER - 10589

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
TOTAL COLIFORM	** <1	09/29/89	KS
CHEMICAL OXYGEN DEMAND	<5.0	10/05/89	KS
CHLORIDE	26.0	09/29/89	DM
NITRATE as N	6.77	09/29/89	DM
SULFATE	61.9	09/29/89	DM
CONDUCTIVITY (umhos/cm)	663.0	10/10/89	JR
AMMONIA as N	<0.05	10/13/89	KS
BARIUM	<0.1	10/04/89	DM
COPPER	<0.01	10/10/89	SH
IRON	0.04	10/10/89	SH
MANGANESE	<0.01	10/10/89	SH
IRON (DISS.)	0.01	10/10/89	SH
MANGANESE (DISS.)	<0.01	10/10/89	SH
ZINC (DISS.)	0.014	10/10/89	SH

COMMENTS: \*\* NO COLIFORM BACTERIA WERE FOUND ON CULTURE PLATE.  
NITRITE as N : <0.5

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Laboratory Manager

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104 West 31st Street  
Boise, Idaho 83714  
(208) 336-1172

## LABORATORY REPORT

TECHNICO AND ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

ATTENTION: JOHN ZILlich  
SOURCE -: JUB 2

DATE COLLECTED - - -09/28/89  
TIME COLLECTED - - -  
DATE RECEIVED - - - 09/29/89  
DATE REPORTED - - - 10/13/89  
SUBMITTED : JOHN ZILlich

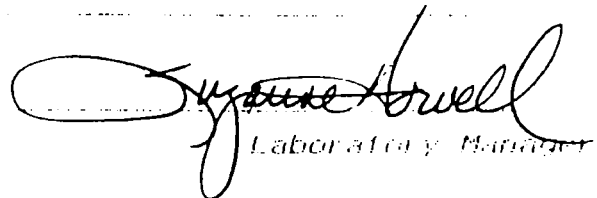
LAB SAMPLE NUMBER - 10590

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
CHEMICAL OXYGEN DEMAND	33.0	10/05/89	KS
CHLORIDE	36.3	10/13/89	KS
NITRATE as N	6.94	10/05/89	KS
SULFATE	65.6	10/13/89	KS
CONDUCTIVITY (umhos/cm)	663.0	10/10/89	JR
AMMONIA as N	<0.05	10/13/89	KS
BARIUM	<0.1	10/12/89	DM
COPPER	<0.01	10/10/89	SH
IRON	0.02	10/10/89	SH
MANGANESE	0.01	10/10/89	SH
IRON (DISS.)	0.02	10/10/89	SH
MANGANESE (DISS.)	0.01	10/10/89	SH
ZINC (DISS.)	0.019	10/10/89	SH

COMMENTS: NITRITE as N - -: <0.5

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Laboratory Manager

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## LABORATORY REPORT

TECHNICO AND ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

ATTENTION: JOHN ZILlich  
SOURCE -: EE 3

DATE COLLECTED - - -09/28/89  
TIME COLLECTED - - -  
DATE RECEIVED - - - 09/29/89  
DATE REPORTED - - - 10/13/89  
SUBMITTED : JOHN ZILlich

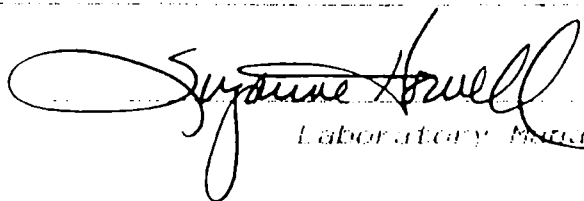
LAB SAMPLE NUMBER - 10591

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
TOTAL COLIFORM	** <1	09/29/89	KS
CHEMICAL OXYGEN DEMAND	13.0	10/05/89	KS
CHLORIDE	39.2	09/29/89	DM
NITRATE as N	0.29	09/29/89	DM
SULFATE	65.2	09/29/89	DM
CONDUCTIVITY (umhos/cm)	829.0	10/10/89	JR
AMMONIA as N	<0.05	10/13/89	KS
BARIUM	0.1	10/04/89	DM
COPPER	<0.01	10/10/89	SH
IRON	10.8	10/10/89	SH
MANGANESE	1.12	10/10/89	SH
IRON (DISS.)	0.12	10/10/89	SH
MANGANESE (DISS.)	1.04	10/10/89	SH
ZINC (DISS.)	0.026	10/10/89	SH

COMMENTS: \*\* NO COLIFORM BACTERIA WERE FOUND ON CULTURE PLATE.  
NITRITE as N : <0.5

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Laboratory Manager

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## LABORATORY REPORT

TECHNICO AND ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

ATTENTION: JOHN ZILLICH  
SOURCE -: EE 2

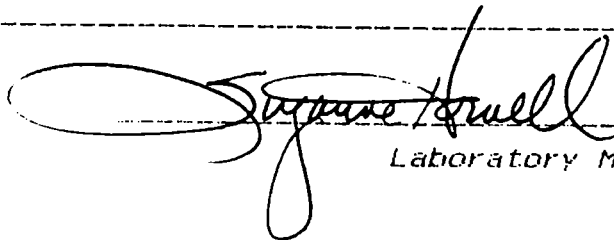
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TIME COLLECTED - - -2:37 PM  
DATE RECEIVED - - - 09/29/89  
DATE REPORTED - - - 10/11/89  
SUBMITTED : JOHN ZILLICH

LAB SAMPLE NUMBER - 10593

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
BARIUM	<0.1	10/04/89	DM
COPPER	<0.01	10/10/89	SH
IRON	0.06	10/10/89	SH
MANGANESE	<0.01	10/10/89	SH

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Laboratory Manager



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## LABORATORY REPORT

TECHNICO AND ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

DATE COLLECTED - - -09/28/89  
TIME COLLECTED - - -  
DATE RECEIVED - - - 10/05/89  
DATE REPORTED - - - 10/12/89  
SUBMITTED : JOHN ZILlich

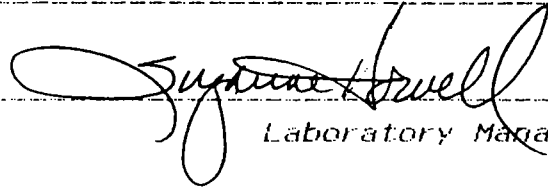
ATTENTION: JOHN ZILlich  
SOURCE -: WSW

LAB SAMPLE NUMBER - 10747

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
BARIUM	<0.1	10/12/89	DM
COPPER	<0.01	10/10/89	SH
IRON	0.02	10/10/89	SH
MANGANESE	<0.01	10/10/89	SH

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Laboratory Manager

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## LABORATORY REPORT

TECHNICO AND ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

ATTENTION: JOHN ZILlich  
SOURCE -: EEB

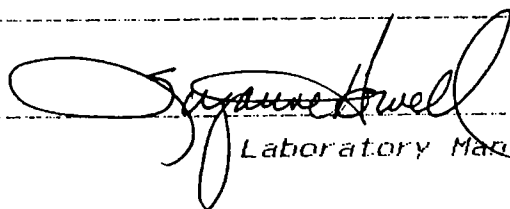
DATE COLLECTED - - -09/28/89  
TIME COLLECTED - - -10:40 AM  
DATE RECEIVED - - - 10/05/89  
DATE REPORTED - - - 10/12/89  
SUBMITTED : JOHN ZILlich

LAB SAMPLE NUMBER - 10746

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
BARIUM	0.1	10/12/89	DM
COPPER	<0.01	10/10/89	SH
IRON	0.02	10/10/89	SH
MANGANESE	<0.01	10/10/89	SH

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## LABORATORY REPORT

TECHNICO AND ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

ATTENTION: JOHN ZILlich  
SOURCE -: EE7

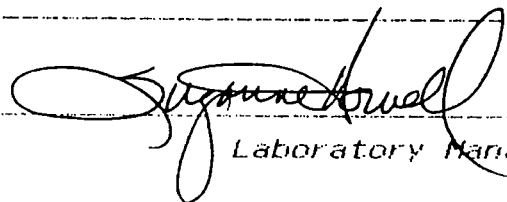
DATE COLLECTED - - -09/28/89  
TIME COLLECTED - - -9:11 AM  
DATE RECEIVED - - - 10/05/89  
DATE REPORTED - - - 10/12/89  
SUBMITTED : JOHN ZILlich

LAB SAMPLE NUMBER - 10745

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
BARIUM	0.1	10/12/89	DM
COPPER	<0.01	10/10/89	SH
IRON	0.22	10/10/89	SH
MANGANESE	0.01	10/10/89	SH

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Laboratory Manager

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## LABORATORY REPORT

TECHNICO AND ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

ATTENTION: JOHN ZILLICH  
SOURCE -: BE6

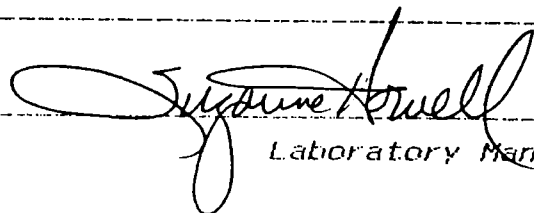
DATE COLLECTED - - -09/28/89  
TIME COLLECTED - - -  
DATE RECEIVED - - - 10/05/89  
DATE REPORTED - - - 10/12/89  
SUBMITTED : JOHN ZILLICH

LAB SAMPLE NUMBER - 10744

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
BARIUM	0.1	10/12/89	DM
COPPER	0.03	10/10/89	SH
IRON	2.48	10/10/89	SH
MANGANESE	0.10	10/10/89	SH

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Laboratory Manager

# ALCHEM LABORATORY

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Boise, Idaho 83714  
(208) 336-1172

## LABORATORY REPORT

TECHNICO AND ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

ATTENTION: JOHN ZILlich  
SOURCE -: EE5

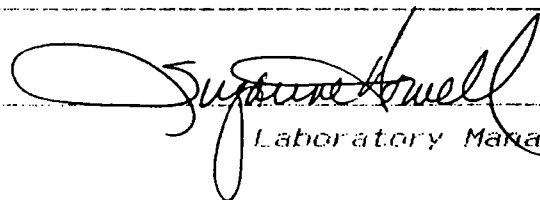
DATE COLLECTED - - -09/28/89  
TIME COLLECTED - - -2:40 PM  
DATE RECEIVED - - - 10/05/89  
DATE REPORTED - - - 10/12/89  
SUBMITTED : JOHN ZILlich

LAB SAMPLE NUMBER - 10743

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
BARIUM	0.1	10/12/89	DM
COPPER	<0.01	10/10/89	SH
IRON	0.01	10/10/89	SH
MANGANESE	<0.01	10/10/89	SH

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Laboratory Manager

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Boise, Idaho 83714  
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## LABORATORY REPORT

TECHNICO AND ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

ATTENTION: JOHN ZILlich  
SOURCE -: EE4

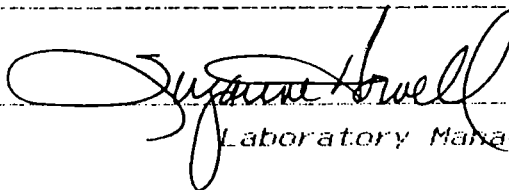
DATE COLLECTED - - -09/28/89  
TIME COLLECTED - - -  
DATE RECEIVED - - - 10/05/89  
DATE REPORTED - - - 10/12/89  
SUBMITTED : JOHN ZILlich

LAB SAMPLE NUMBER - 10742

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
BARIUM	0.1	10/12/89	DM
COPPER	<0.01	10/10/89	SH
IRON	0.01	10/10/89	SH
MANGANESE	0.01	10/10/89	SH

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Laboratory Manager

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Boise, Idaho 83714  
(208)336-1172

TECHNICO - ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

DATE COLLECTED: 09/28/89  
TIME COLLECTED: 12:30 PM  
DATE RECEIVED: 09/29/89  
DATE REPORTED: 10/26/89

ATTENTION: JOHN ZILLICH  
SOURCE: JUB 2

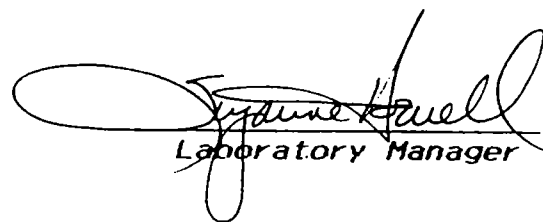
## LABORATORY SAMPLE NO. - 10592

=====

ANALYSIS	RESULTS (ppb)
Vinyl Chloride	<2
1,1 Dichloroethane	73.8
Chloroform	33.1
1,1,1 Trichloroethane	134.0
Trichloroethene	166.0
Tetrachloroethene	9.8
Total Xylene	<2
1,1 Dichloroethene	37.3
trans 1,2 Dichloroethene	<2
Toluene	<2

=====

Analyst: Dale Myers

  
Laboratory Manager



# ALCHEM LABORATORY

104 W. 31st Street  
Boise, Idaho 83714  
(208)336-1172

TECHNICO - ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

DATE COLLECTED: 10/03/89  
TIME COLLECTED:  
DATE RECEIVED: 10/04/89  
DATE REPORTED: 10/26/89

ATTENTION: JOHN ZILlich  
SOURCE: EE 8

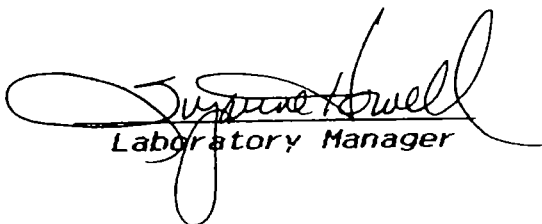
LABORATORY SAMPLE NO. - 10718

=====

ANALYSIS	RESULTS (ppb)
Vinyl Chloride	<2
1,1 Dichloroethane	<2
Chloroform	<2
1,1,1 Trichloroethane	<2
Trichloroethene	<2
Tetrachloroethene	<2
Total Xylene	<2
1,1 Dichloroethene	<2
trans 1,2 Dichloroethene	<2
Toluene	<2

=====

Analyst: Dale Myers

  
Laboratory Manager

# ALCHEM LABORATORY

104 W. 31st Street  
Boise, Idaho 83714  
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TECHNICO - ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

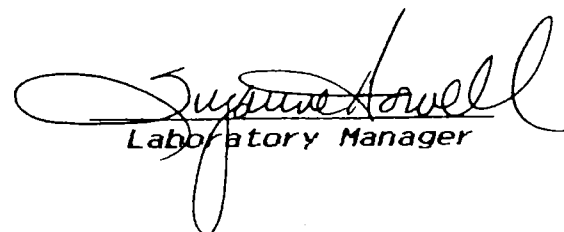
DATE COLLECTED: 10/03/89  
TIME COLLECTED:  
DATE RECEIVED: 10/04/89  
DATE REPORTED: 10/26/89

ATTENTION: JOHN ZILLICH  
SOURCE: EE 7

LABORATORY SAMPLE NO. - 10717

ANALYSIS	RESULTS (ppb)
Vinyl Chloride	<2
1,1 Dichloroethane	<2
Chloroform	<2
1,1,1 Trichloroethane	<2
Trichloroethene	<2
Tetrachloroethene	<2
Total Xylene	<2
1,1 Dichloroethene	<2
trans 1,2 Dichloroethene	<2
Toluene	<2

Analyst: Dale Myers

  
Laboratory Manager

**ALCHEM LABORATORY**

104 W. 31st Street  
Boise, Idaho 83714  
(208)336-1172

TECHNICO - ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

DATE COLLECTED: 10/03/89  
TIME COLLECTED:  
DATE RECEIVED: 10/04/89  
DATE REPORTED: 10/26/89

ATTENTION: JOHN ZILLICH  
SOURCE: EE 6

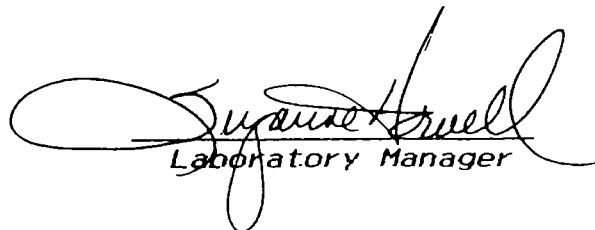
LABORATORY SAMPLE NO. - 10716

=====

ANALYSIS	RESULTS (ppb)
Vinyl Chloride	<2
1,1 Dichloroethane	<2
Chloroform	<2
1,1,1 Trichloroethane	<2
Trichloroethene	<2
Tetrachloroethene	<2
Total Xylene	<2
1,1 Dichloroethene	<2
trans 1,2 Dichloroethene	<2
Toluene	<2

=====

Analyst: Dale Myers

  
Laboratory Manager

# ALCHEM LABORATORY

104 W. 31st Street  
Boise, Idaho 83714  
(208)336-1172

TECHNICO - ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

DATE COLLECTED: 10/03/89  
TIME COLLECTED:  
DATE RECEIVED: 10/04/89  
DATE REPORTED: 10/26/89

ATTENTION: JOHN ZILLICH  
SOURCE: EE 5

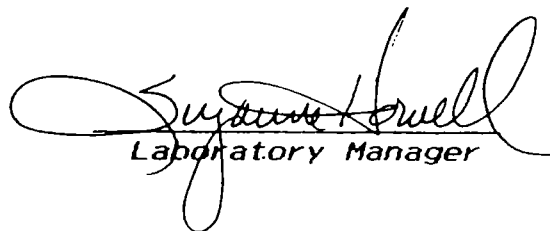
LABORATORY SAMPLE NO. - 10715

=====

ANALYSIS	RESULTS (ppb)
Vinyl Chloride	<2
1,1 Dichloroethane	<2
Chloroform	<2
1,1,1 Trichloroethane	<2
Trichloroethene	<2
Tetrachloroethene	<2
Total Xylene	<2
1,1 Dichloroethene	<2
trans 1,2 Dichloroethene	<2
Toluene	<2

=====

Analyst: Dale Myers

  
Laboratory Manager

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104 W. 31st Street  
Boise, Idaho 83714  
(208)336-1172

TECHNICO - ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

DATE COLLECTED: 10/03/89  
TIME COLLECTED:  
DATE RECEIVED: 10/04/89  
DATE REPORTED: 10/26/89

ATTENTION: JOHN ZILLICH  
SOURCE: EE 4

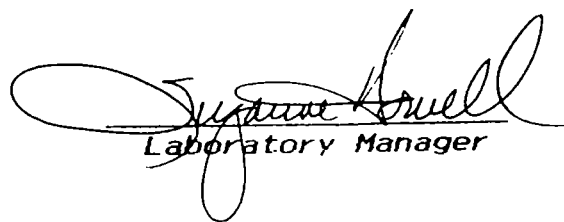
LABORATORY SAMPLE NO. - 10714

=====

ANALYSIS	RESULTS (ppb)
Vinyl Chloride	<2
1,1 Dichloroethane	<2
Chloroform	<2
1,1,1 Trichloroethane	<2
Trichloroethene	<2
Tetrachloroethene	<2
Total Xylene	<2
1,1 Dichloroethene	<2
trans 1,2 Dichloroethene	<2
Toluene	<2

=====

Analyst: Dale Myers

  
Laboratory Manager

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TECHNICO - ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

DATE COLLECTED: 10/03/89  
TIME COLLECTED: 4:00 PM  
DATE RECEIVED: 10/04/89  
DATE REPORTED: 10/26/89

ATTENTION: JOHN ZILICH  
SOURCE: NSW

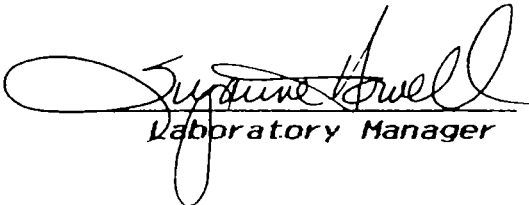
LABORATORY SAMPLE NO. - 10599

=====

ANALYSIS	RESULTS (ppb)
Vinyl Chloride	<2
1,1 Dichloroethane	<2
Chloroform	<2
1,1,1 Trichloroethane	<2
Trichloroethene	<2
Tetrachloroethene	<2
Total Xylene	<2
1,1 Dichloroethene	<2
trans 1,2 Dichloroethene	<2
Toluene	<2

=====

Analyst: Dale Myers

  
Laboratory Manager

# ALCHEM LABORATORY

104 W. 31st Street  
Boise, Idaho 83714  
(208)336-1172

TECHNICO - ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

DATE COLLECTED: 09/28/89  
TIME COLLECTED:  
DATE RECEIVED: 09/29/89  
DATE REPORTED: 10/26/89

ATTENTION: JOHN ZILlich  
SOURCE: EE 3

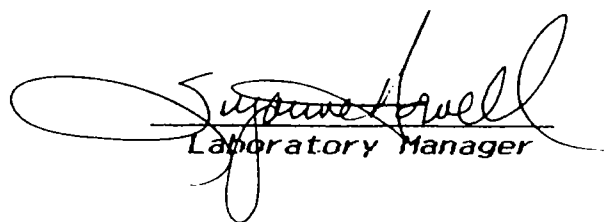
LABORATORY SAMPLE NO. - 10598

=====

ANALYSIS	RESULTS (ppb)
Vinyl Chloride	13.6
1,1 Dichloroethane	380.0
Chloroform	63.0
1,1,1 Trichloroethane	1093.0
Trichloroethene	1035.0
Tetrachloroethene	102.0
Total Xylene	712.0
1,1 Dichloroethene	216.0
trans 1,2 Dichloroethene	<2
Toluene	2100.0

=====

Analyst: Dale Myers

  
Laboratory Manager

# ALCHEM LABORATORY

104 W. 31st Street  
Boise, Idaho 83714  
(208)336-1172

TECHNICO - ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

DATE COLLECTED: 09/28/89  
TIME COLLECTED: 2:37 PM  
DATE RECEIVED: 09/29/89  
DATE REPORTED: 10/26/89

ATTENTION: JOHN ZILlich  
SOURCE: EE 2

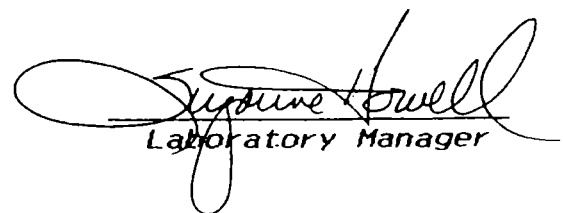
LABORATORY SAMPLE NO. - 10597

=====

ANALYSIS	RESULTS (ppb)
Vinyl Chloride	<2
1,1 Dichloroethane	9.7
Chloroform	<2
1,1,1 Trichloroethane	25.3
Trichloroethene	24.8
Tetrachloroethene	6.4
Total Xylene	<2
1,1 Dichloroethene	4.3
trans 1,2 Dichloroethene	<2
Toluene	<2

=====

Analyst: Dale Myers

  
Laboratory Manager



# ALCHEM LABORATORY

104 W. 31st Street  
Boise, Idaho 83714  
(208)336-1172

TECHNICO - ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

DATE COLLECTED: 09/28/89  
TIME COLLECTED: 9:40 AM  
DATE RECEIVED: 09/29/89  
DATE REPORTED: 10/26/89

ATTENTION: JOHN ZILLICH  
SOURCE: JUB 4

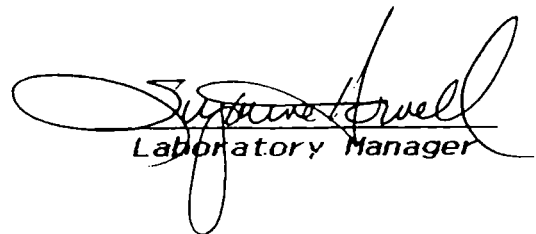
LABORATORY SAMPLE NO. - 10596

=====

ANALYSIS	RESULTS (ppb)
Vinyl Chloride	<2
1,1 Dichloroethane	<2
Chloroform	<2
1,1,1 Trichloroethane	<2
Trichloroethene	<2
Tetrachloroethene	<2
Total Xylene	<2
1,1 Dichloroethene	<2
trans 1,2 Dichloroethene	<2
Toluene	<2

=====

Analyst: Dale Myers

  
Laboratory Manager

# ALCHEM LABORATORY

104 W. 31st Street  
Boise, Idaho 83714  
(208)336-1172

TECHNICO - ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

DATE COLLECTED: 09/28/89  
TIME COLLECTED:  
DATE RECEIVED: 09/29/89  
DATE REPORTED: 10/26/89

ATTENTION: JOHN ZILLICH  
SOURCE: JUB CONTROL

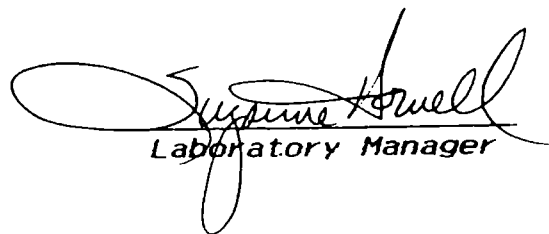
LABORATORY SAMPLE NO. - 10595

=====

ANALYSIS	RESULTS (ppb)
Vinyl Chloride	<2
1,1 Dichloroethane	<2
Chloroform	<2
1,1,1 Trichloroethane	<2
Trichloroethene	<2
Tetrachloroethene	<2
Total Xylene	<2
1,1 Dichloroethene	<2
trans 1,2 Dichloroethene	<2
Toluene	<2

=====

Analyst: Dale Myers

  
Laboratory Manager

Technico & Enviro Services Co.

(509) 7357283

Suite 33

1776 Fowler

Richland, Wa. 99352

*File Copy*  
*Reg Cones*

July 25, 1989


Mr. Cris Matthews  
Solid Waste Coordinator  
Environmental Quality Div.  
Washington Dept. of Ecology  
N. 461 Monroe Street, Suite 100  
Spokane, WA 99205-1295

Subject: Groundwater Monitoring Results at the Pasco  
Sanitary Landfill

Dear Mr. Matthews:

This letter provides you with the water quality monitoring results for  
the second quarter of 1989.

Sincerely,

  
John A. Zillich  
JAZ/tg

Enclosure

cc: Larry Dietrich  
Larry Kamberg

PLF FIELD MEAS 6/3/89

SITE: PASO		GROUND WATER						
DATE: 6/3/89		FIELD DATA SHEET						
WELL NO.	DATE	MEASURED AT	TOP OF CASING ELEVATION	DEPTH TO WATER	GROUND WATER ELEVATION	SPEC COND	pH	TEMP C
JUB CONTROL	6/3/89	TOP OF PVC	411.6	52.00	359.60	540	7.2	200
JUB 1	6/3/89	TOP OF PVC	417.1	68.62	348.48			
JUB 2	6/3/89	HOLE IN CAP	408.3	59.50	348.81	600	7.4	17.6
JUB 3	6/3/89	TOP OF PVC	420.4	72.73	347.67			
JUB 4	6/3/89	TOP OF PVC	393.7	40.22	353.48	640	6.7	
EE 1	6/3/89	TOP OF PIPE	417.2	57.50	359.70			
EE 2	6/3/89	HOLE IN CAP	418.9	67.31	351.56	610	7.6	18.7
EE 3	6/3/89	HOLE IN CAP	416.8	65.56	351.21	735	7	17.9
EE 4	6/3/89	TOP OF PIPE	397.6	45.84	351.76			
EE 5	6/3/89	TOP OF PIPE	407.9	54.51	353.39			
EE 6	6/3/89	TOP OF PIPE	427.0	72.35	354.65			
EE 7	6/3/89	TOP OF PIPE	425.6	71.49	354.11			
EE 8	6/3/89	TOP OF PIPE	428.4	74.12	354.28			

# ALCHEM LABORATORY

104 West 31st Street  
Boise, Idaho 83714  
(208) 336-1172

## LABORATORY REPORT

TECHNICO\*ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99336

DATE COLLECTED - - -06/03/89  
TIME COLLECTED - - -  
DATE RECEIVED - - - 06/07/89  
DATE REPORTED - - - 06/29/89  
SUBMITTED : JOHN ZILlich

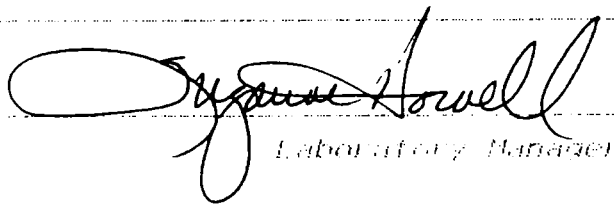
ATTENTION: JOHN ZILlich  
SOURCE -: EE3

LAB SAMPLE NUMBER - 8575

Results reported unless noted: (Chemistry Analysis as  $\mu\text{g/l}$ ) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
CHEMICAL OXYGEN DEMAND	38.0	06/09/89	RC
BARIUM	0.1	06/29/89	DM
COPPER	<0.01	06/23/89	SH
IRON (DISS.)	0.02	06/23/89	SH
MANGANESE (DISS.)	1.05	06/23/89	SH
ZINC (DISS.)	0.008	06/26/89	SH

This report for the exclusive use of the client(s) to whom it is addressed. Its disclosure to others for use in advertising is not authorized. These results refer only to the specific sample tested. Liability is limited to cost of analysis.

  
Laboratory Manager

# ALCHEM LABORATORY

104 West 31st Street  
Boise, Idaho 83714  
(208) 336-1172

## LABORATORY REPORT

TECHNICO\*ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99336

ATTENTION: JOHN ZILLICH  
SOURCE -: JUB 2

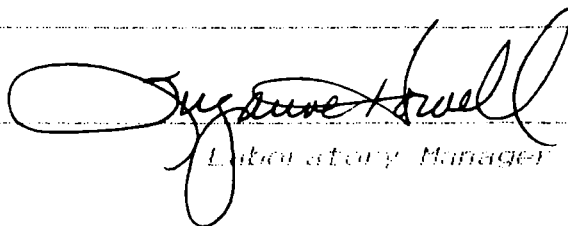
DATE COLLECTED - - -06/03/89  
TIME COLLECTED - - -  
DATE RECEIVED - - - 06/07/89  
DATE REPORTED - - - 06/29/89  
SUBMITTED : JOHN ZILLICH

LAB SAMPLE NUMBER - 8576

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
CHEMICAL OXYGEN DEMAND	6.0	06/09/89	RC
BARIUM	<0.1	06/29/89	DM
COPPER	<0.01	06/23/89	SH
IRON (DISS.)	0.01	06/23/89	SH
MANGANESE (DISS.)	<0.01	06/23/89	SH
ZINC (DISS.)	0.006	06/26/89	SH

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Laboratory Manager

# ALCHEM LABORATORY

104 West 31st Street  
Boise, Idaho 83714  
(208) 336-1172

## LABORATORY REPORT

TECHNICO\*ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99336

ATTENTION: JOHN ZILlich  
SOURCE -: JUB 4

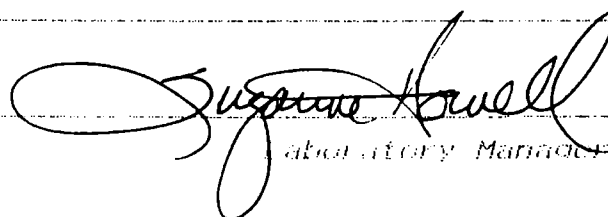
DATE COLLECTED - - -06/03/89  
TIME COLLECTED - - -  
DATE RECEIVED - - - 06/07/89  
DATE REPORTED - - - 06/29/89  
SUBMITTED : JOHN ZILlich

LAB SAMPLE NUMBER - 8577

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
CHEMICAL OXYGEN DEMAND	10.0	06/09/89	RC
BARIUM	0.1	06/29/89	DM
COPPER	<0.01	06/23/89	SH
IRON (DISS.)	<0.01	06/23/89	SH
MANGANESE (DISS.)	<0.01	06/23/89	SH
ZINC (DISS.)	0.009	06/26/89	SH

This report for the exclusive use of the client(s) to whom it is addressed. Its disclosure to others for use in advertising is not authorized. These results refer only to the specific sample tested. Liability is limited to cost of analysis.

  
Laboratory Manager

# ALCHEM LABORATORY

104 West 31st Street  
Boise, Idaho 83714  
(208) 336-1172

## LABORATORY REPORT

TECHNICO\*ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99336

ATTENTION: JOHN ZILlich  
SOURCE -: JUB CONTROL

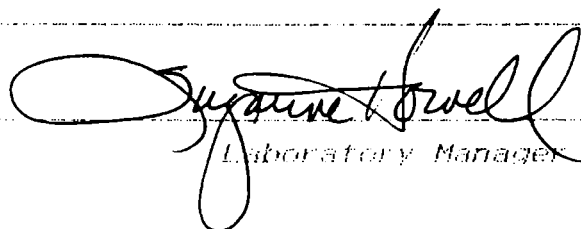
DATE COLLECTED - - -06/03/89  
TIME COLLECTED - - -  
DATE RECEIVED - - - 06/07/89  
DATE REPORTED - - - 06/29/89  
SUBMITTED : JOHN ZILlich

LAB SAMPLE NUMBER - 8578

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
CHEMICAL OXYGEN DEMAND	11.0	06/09/89	RC
BARIUM	<0.1	06/29/89	DM
COPPER	0.01	06/23/89	SH
IRON (DISS.)	0.03	06/23/89	SH
MANGANESE (DISS.)	<0.01	06/23/89	SH
ZINC (DISS.)	0.011	06/26/89	SH

This report for the exclusive use of the client(s) to whom it is addressed. Its disclosure to others for use in advertising is not authorized. These results refer only to the specific sample tested. Liability is limited to cost of analysis.

  
Laboratory Manager



# ALCHEM LABORATORY

104 W. 31st Street  
Boise, Idaho 83714  
(208)336-1172

TECHNICO - ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

DATE COLLECTED: 06/03/89  
DATE RECEIVED: 06/07/89  
DATE REPORTED: 06/19/89

ATTENTION: JOHN ZILlich  
SOURCE: JUB 2

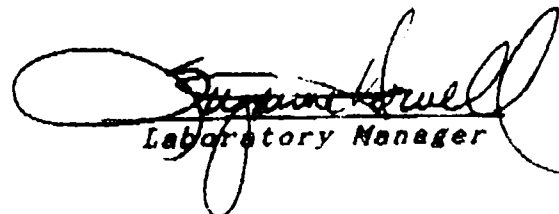
LABORATORY SAMPLE NO. - 8581

=====

ANALYSIS	RESULTS (ppb)
Vinyl Chloride	<2
1,1 Dichloroethane	39.7
Chloroform	16.1
1,1,1 Trichloroethane	85.1
Trichloroethene	107.0
Tetrachloroethene	5.9
Total Xylene	<2
1,1 Dichloroethene	16.3
trans 1,2 Dichloroethene	<2
Toluene	<2

=====

Analyst: Dale Myers

  
Laboratory Manager

Note: The portable bladder pump  
used to sample JUB Control +  
JUB 4 had a leak and was inoperable.  
Theromells were sampled with an

# ALCHEM LABORATORY

104 W. 31st Street  
Boise, Idaho 83714  
(208)336-1172

TECHNICO - ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

DATE COLLECTED: 06/03/89  
DATE RECEIVED: 06/07/89  
DATE REPORTED: 06/19/89

ATTENTION: JOHN ZILLICH  
SOURCE: EE2

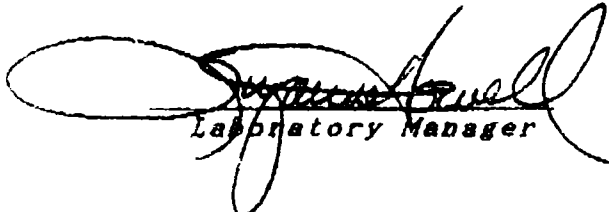
LABORATORY SAMPLE NO. - 8579

=====

ANALYSIS	RESULTS (ppb)
Vinyl Chloride	<2
1,1 Dichloroethane	20.2
Chloroform	2.3
1,1,1 Trichloroethane	50.5
Trichloroethene	52.0
Tetrachloroethene	30.6
Total Xylene	<2
1,1 Dichloroethene	10.2
trans 1,2 Dichloroethene	<2
Toluene	<2

=====

Analyst: Dale Myers

  
Laboratory Manager

# ALCHEM LABORATORY

104 W. 31st Street  
Boise, Idaho 83714  
(208)336-1172

TECHNICO - ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

DATE COLLECTED: 06/03/89  
DATE RECEIVED: 06/07/89  
DATE REPORTED: 06/19/89

ATTENTION: JOHN ZILlich  
SOURCE: EES

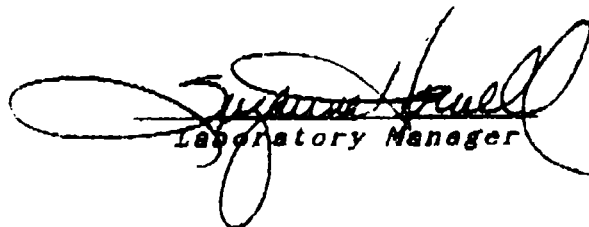
LABORATORY SAMPLE NO. - 8580

=====

ANALYSIS	RESULTS (ppb)
Vinyl Chloride	7.82
1,1 Dichloroethane	213.0
Chloroform	35.0
1,1,1 Trichloroethane	591.0
Trichloroethene	684.0
Tetrachloroethene	45.2
Total Xylene	477.0
1,1 Dichloroethene	120.0
trans 1,2 Dichloroethene	<2
Toluene	996.0

=====

Analyst: Dale Myers

  
Laboratory Manager

TECHNICO & ENVIRO SERVICES CO.  
ANALYTICAL REPORT

CLIENT: PASCO LANDFILL  
SAMPLED: 6/3/89  
REPORTED: 7/20/89

LOCATION	DATE	CHLORIDE	AMMONIA	NITRITE
JUB CONRTOL	6/3/89	25.5	<0.1	<0.05
EE3	6/3/89	42.5	<0.1	<0.05
JUB2	6/3/89	30.0	<0.1	<0.05
JUB4	6/3/89	27.0	<0.1	<0.05

FIG.2. 1,1,1-TRICHLOROETHANE EE2 VS JUB2.

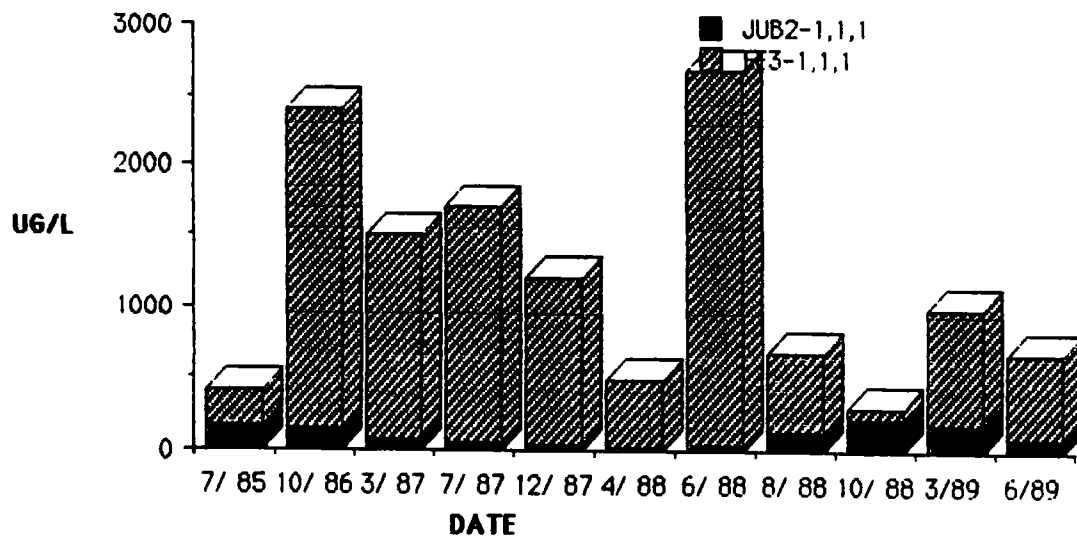


FIG.2L. 1,1,1 TRICHLOROETHANE EE2 VS JUB2 VS STD.

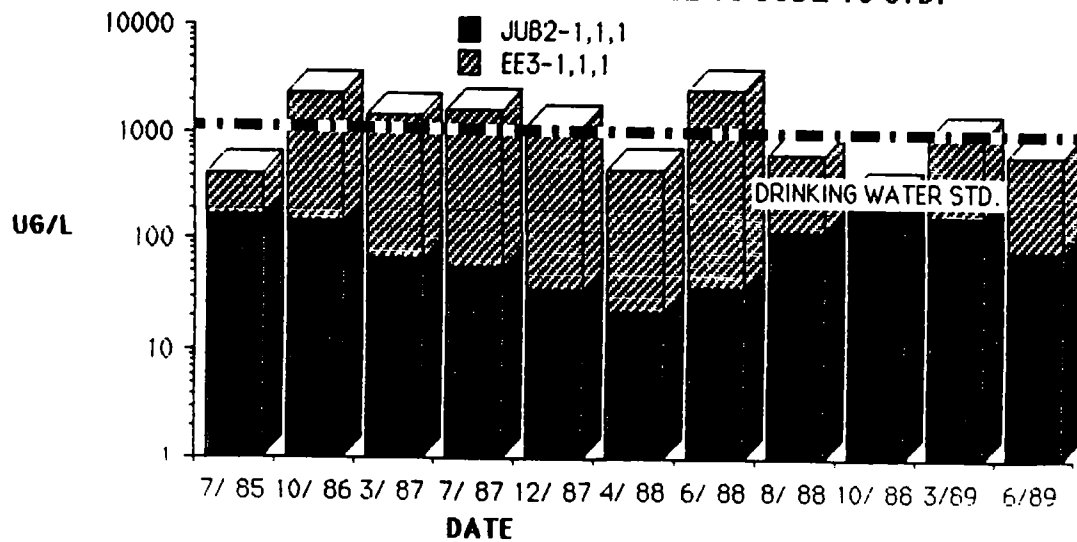


FIG.3. TRICHLOROETHYLENE EE3 VS JUB2.

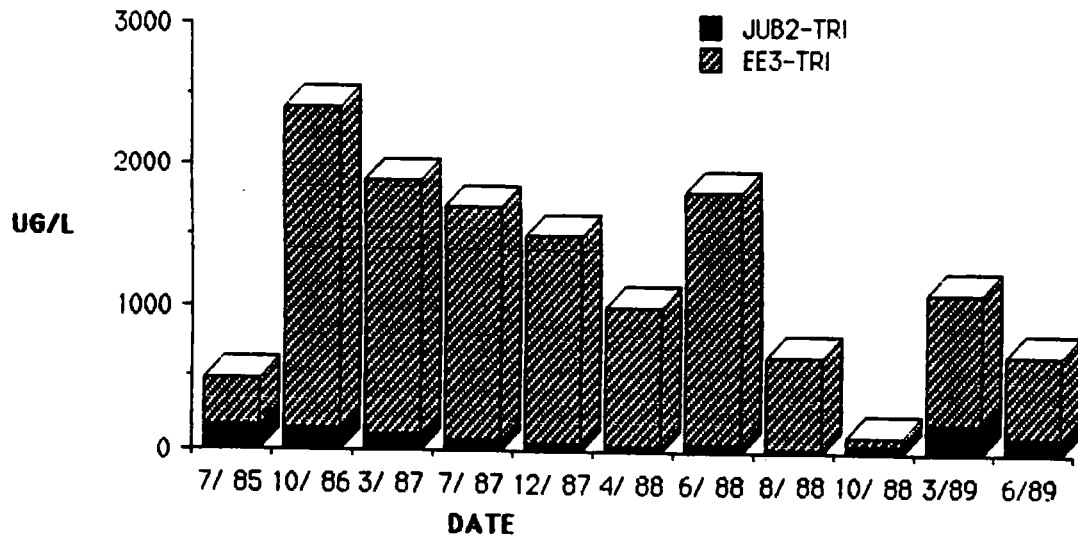


FIG.3L. TRICHLOROETHYLENE EE3 VS JUB2 VS STD.

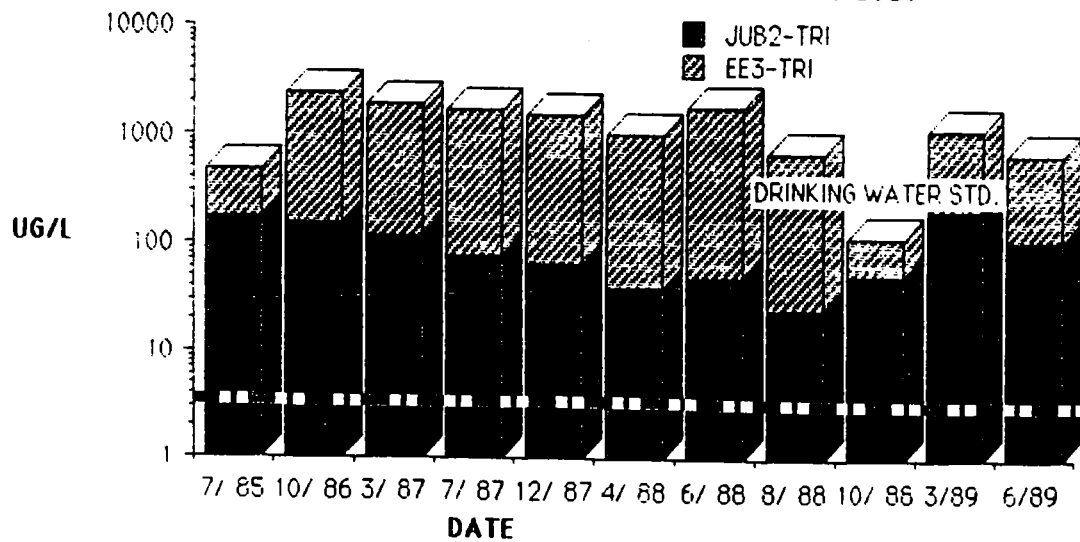


FIG.4. TETRACHLOROETHYLENE EE3 VS JUB2.

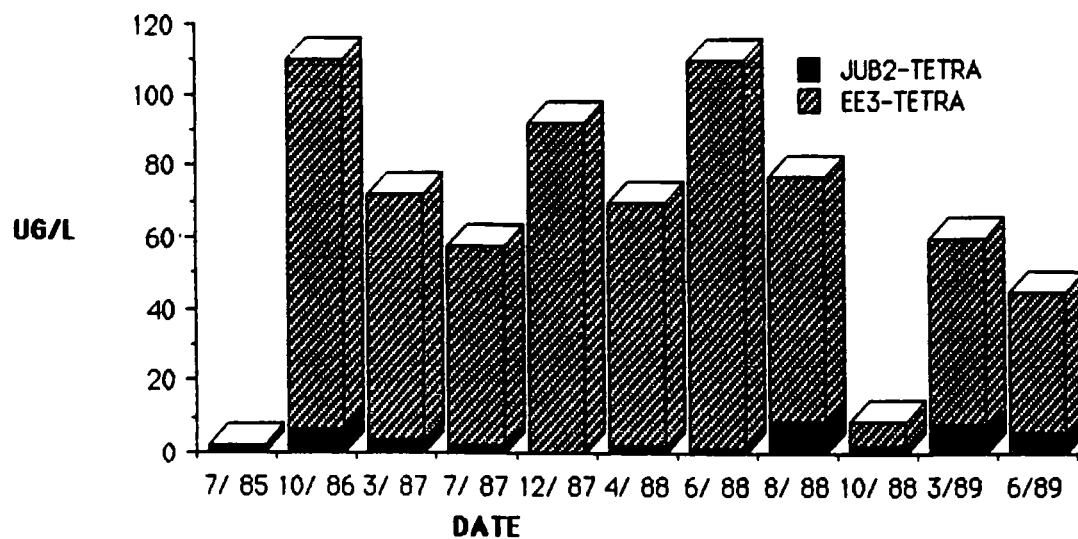
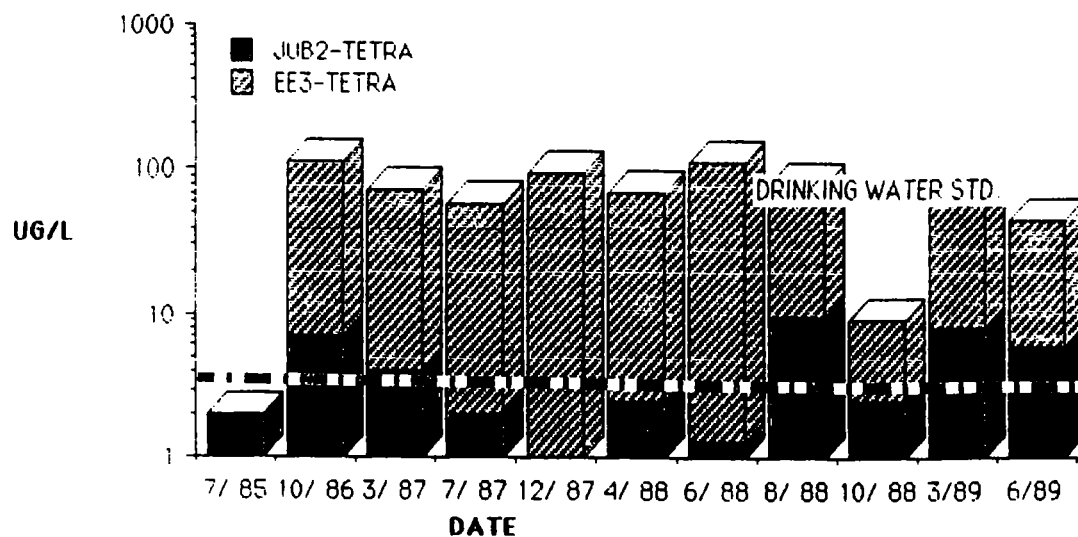


FIG.4L. TETRACHLOROETHYLENE EE2 VS JUB2 VS STD.



FILE COPY/c

Technico & Enviro Services Co.

---

(509) 7357283

Suite 33

1776 Fowler

Richland, Wa. 99352

April 25, 1989

Mr. Cris Matthews  
Solid Waste Coordinator  
Environmental Quality Div.  
Washington Dept. of Ecology  
N. 461 Monroe Street, Suite 100  
Spokane, WA 99205-1295

Subject: Groundwater Monitoring Results at the Pasco  
Sanitary Landfill

Dear Mr. Matthews:

This letter provides you with the water quality monitoring results for  
the first quarter of 1989.

Sincerely,

John A. Zillich

JAZ/tg

Enclosure

cc: Larry Dietrich  
Larry Kamberg



SITE: PASCO			ELEVATION DATA SHEET					
DATE: 3/89								
WELL NO.	DATE	MEASURED AT	TOP OF CASING ELEVATION	DEPTH TO WATER	GROUND WATER ELEVATION	SPEC COND	pH	TEMP C
JUB CONTROL	3/20/89	TOP OF PYC	411.6	52.80	358.80	540	7.85	16.8
JUB 1	3/20/89	TOP OF PYC	417.1	68.41	348.69			
JUB 2	3/20/89	HOLE IN CAP	408.3	59.35	348.96	560	7.6	16.8
JUB 3	3/20/89	TOP OF PYC	420.4	72.55	347.85			
JUB 4	3/20/89	TOP OF PYC	393.7	40.22	353.48	640	7.45	17.9
EE 1	3/20/89	TOP OF PIPE	417.2	57.49	359.71			
EE 2	3/20/89	HOLE IN CAP	418.9	67.29	351.58	650	7.4	16.6
EE 3	3/20/89	HOLE IN CAP	416.8	65.60	351.17	680	7	16.8
EE 4	3/20/89	TOP OF PIPE	397.6	45.40	352.20			
EE 5	3/20/89	TOP OF PIPE	407.9	58.51	349.39			
EE 6	3/20/89	TOP OF PIPE	427.0	72.25	354.75			
EE 7	3/20/89	TOP OF PIPE	425.6	71.20	354.40			
EE 8	3/20/89	TOP OF PIPE	428.4	71.55	356.85			

TECHNICO & ENVIRO SERVICES CO.  
ANALYTICAL REPORT

CLIENT: PASCO LANDFILL  
SAMPLED: 3/20/89  
REPORTED: 4/20/89

LOCATION	DATE	CHLORIDE (MG/L)	AMMONIA (MG/L)	NITRITE (MG/L)	NITRATE (MG/L)
JUB CONRTOL	3/20/89	25.0		<0.05	7.8
EE3	3/20/89	32.5	<0.1	<0.05	0.8
JUB2	3/20/89	22.5	<0.1	<0.05	8.8
JUB4	3/20/89	22.5	<0.1	<0.05	7.6



Burmah Technical Services, Inc.  
Analytical Laboratories Division

15199 Community Road  
P.O. Drawer 2609  
Gulfport, MS 39505

601-863-3036

### ANALYTICAL REPORT

Technico & Environmental  
1776 Fowler, Suite 33  
Richland, Washington 99352

ATTENTION: Mr. John Zillich

DATE SAMPLE RECEIVED: 3/21/89  
MONTH COVERED: March, 1989  
CLIENT NUMBER: TEC200  
SAMPLED BY: Client  
FREQUENCY: As Requested  
DATE: March 31, 1989

IDENTIFICATION: Water Samples

SAMPLE NUMBER:	13551	13552	13553	13554	13555	
CLIENT ID:	JUB Control	JUB4	EE3	JUB2	EE2	UNITS

#### EPA 601 & 602

Vinyl Chloride	<2	<2	<2	<2	N/A	µg/l
1,1-Dichloroethane	<2	<2	70	8	<2	µg/l
Chloroform	<2	<2	10	15	<2	µg/l
1,1,1-Trichloroethane	<2	<2	1000	180	15	µg/l
Trichloroethylene	<2	<2	1100	200	10	µg/l
Tetrachloroethylene	<2	4	60	8	4	µg/l
Total Xylenes	<2	9	200	<2	<2	µg/l

TOC	9	12	21	10	N/A	mg/l
-----	---	----	----	----	-----	------

D.I. Blank - <1.00  
46 mg/l Check Standard - 45.0  
Acceptable Range - 35-57  
Date Analyzed - 3/23/89  
Analyst - DD

APPROVED BY:

  
BRUCE E. BROWN  
LABORATORY MANAGER

# ALCHEM LABORATORY

104 West 31st Street  
Boise, Idaho 83714  
(208) 336-1172

## LABORATORY REPORT

TECHNICO & ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

DATE COLLECTED - - -03/20/89  
TIME COLLECTED - - -  
DATE RECEIVED - - - 03/21/89  
DATE REPORTED - - - 04/05/89  
SUBMITTED : JOHN ZILlich

ATTENTION: JOHN ZILlich  
SOURCE -: JUB CONTROL

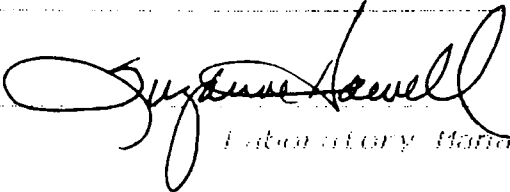
LAB SAMPLE NUMBER - 7250

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
TOTAL COLIFORM	** <1	03/21/89	KS
CHEMICAL OXYGEN DEMAND	11.0	03/31/89	RC
BARIUM	<0.1	04/04/89	DM
COPPER	<0.01	03/21/89	SH
IRON (DISS.)	0.05	03/28/89	SH
MANGANESE (DISS.)	<0.01	03/21/89	SH
ZINC (DISS.)	0.031	03/28/89	SH

COMMENTS: \*\* NO COLIFORM BACTERIA WERE FOUND ON CULTURE PLATE.

This report for the exclusive use of the client(s) to whom it is addressed. Its disclosure to others for use in advertising is not authorized. These results refer only to the specific sample tested. Liability is limited to cost of analysis.

  
Laboratory Manager

# ALCHEM LABORATORY

104 West 31st Street  
Boise, Idaho 83714  
(208) 336-1172

## LABORATORY REPORT

TECHNICO & ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

ATTENTION: JOHN ZILlich  
SOURCE -: EE 3

DATE COLLECTED - - -03/20/89  
TIME COLLECTED - - -  
DATE RECEIVED - - - 03/21/89  
DATE REPORTED - - - 04/05/89  
SUBMITTED : JOHN ZILlich

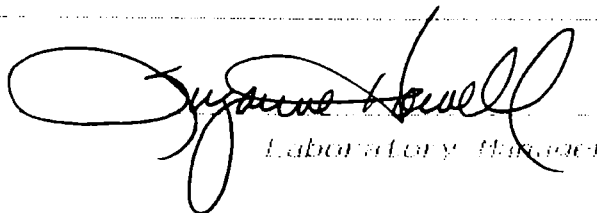
LAB SAMPLE NUMBER - 7251

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
TOTAL COLIFORM	** <1	03/21/89	KS
CHEMICAL OXYGEN DEMAND	20.0	03/31/89	RC
BARIUM	0.2	04/04/89	DM
COPPER	<0.01	03/21/89	SH
IRON (DISS.)	7.90	03/28/89	SH
MANGANESE (DISS.)	1.13	03/21/89	SH
ZINC (DISS.)	0.069	03/28/89	SH

COMMENTS: \*\* NO COLIFORM BACTERIA WERE FOUND ON CULTURE PLATE.

This report for the exclusive use of the client(s) to whom it is addressed. Its disclosure to others for use in advertising is not authorized. These results refer only to the specific sample tested. Liability is limited to cost of analysis.

  
Laboratory Manager

# ALCHEM LABORATORY

104 West 31st Street  
Boise, Idaho 83714  
(208) 336-1172

## LABORATORY REPORT

TECHNICO & ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

ATTENTION: JOHN ZILlich  
SOURCE -: JUB 2

DATE COLLECTED - - -03/20/89  
TIME COLLECTED - - -  
DATE RECEIVED - - - 03/21/89  
DATE REPORTED - - - 04/05/89  
SUBMITTED : JOHN ZILlich

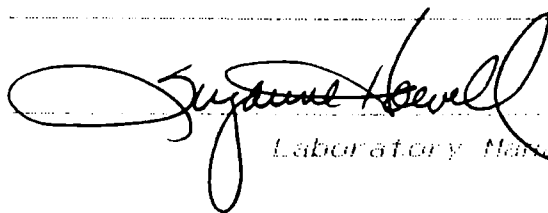
LAB SAMPLE NUMBER - 7252

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
TOTAL COLIFORM	** <1	03/21/89	KS
CHEMICAL OXYGEN DEMAND	4.0	03/31/89	RC
BARIUM	0.1	04/04/89	DM
COPPER	<0.01	03/21/89	SH
IRON (DISS.)	0.23	03/28/89	SH
MANGANESE (DISS.)	0.01	03/21/89	SH
ZINC (DISS.)	0.022	03/28/89	SH

COMMENTS: \*\* NO COLIFORM BACTERIA WERE FOUND ON CULTURE PLATE.

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Laboratory Manager

# ALCHEM LABORATORY

104 West 31st Street  
Boise, Idaho 83714  
(208) 336-1172

## LABORATORY REPORT

TECHNICO & ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

ATTENTION: JOHN ZILlich  
SOURCE -: JUB 4

DATE COLLECTED - - -03/20/89  
TIME COLLECTED - - -  
DATE RECEIVED - - - 03/21/89  
DATE REPORTED - - - 04/05/89  
SUBMITTED : JOHN ZILlich

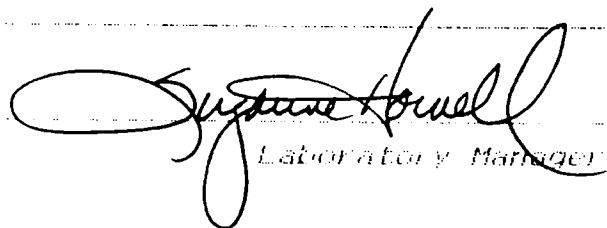
LAB SAMPLE NUMBER - 7253

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
TOTAL COLIFORM	** <1	03/21/89	KS
CHEMICAL OXYGEN DEMAND	13.0	03/31/89	RC
BARIUM	0.2	04/04/89	DM
COPPER	<0.01	03/21/89	SH
IRON (DISS.)	0.31	03/28/89	SH
MANGANESE (DISS.)	<0.01	03/21/89	SH
ZINC (DISS.)	0.014	03/28/89	SH

COMMENTS: \*\* NO COLIFORM BACTERIA WERE FOUND ON CULTURE PLATE.

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Laboratory Manager

# ALCHEM LABORATORY

104 West 31st Street  
Boise, Idaho 83714  
(208) 336-1172

## LABORATORY REPORT

TECHNICO & ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

ATTENTION: JOHN ZILlich  
SOURCE -: EE 2

DATE COLLECTED - - -03/20/89  
TIME COLLECTED - - -  
DATE RECEIVED - - - 03/21/89  
DATE REPORTED - - - 04/05/89  
SUBMITTED : JOHN ZILlich

LAB SAMPLE NUMBER - 7249

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
BARIUM	<0.1	04/04/89	DM
COPPER	<0.01	03/21/89	SH
IRON	0.22	03/28/89	SH
MANGANESE	<0.01	03/21/89	SH

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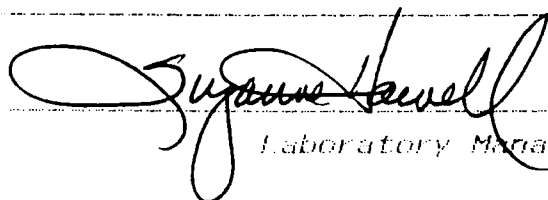
  
Laboratory Manager



FIG.2. 1,1,1-TRICHLOROETHANE EE2 VS JUB2.

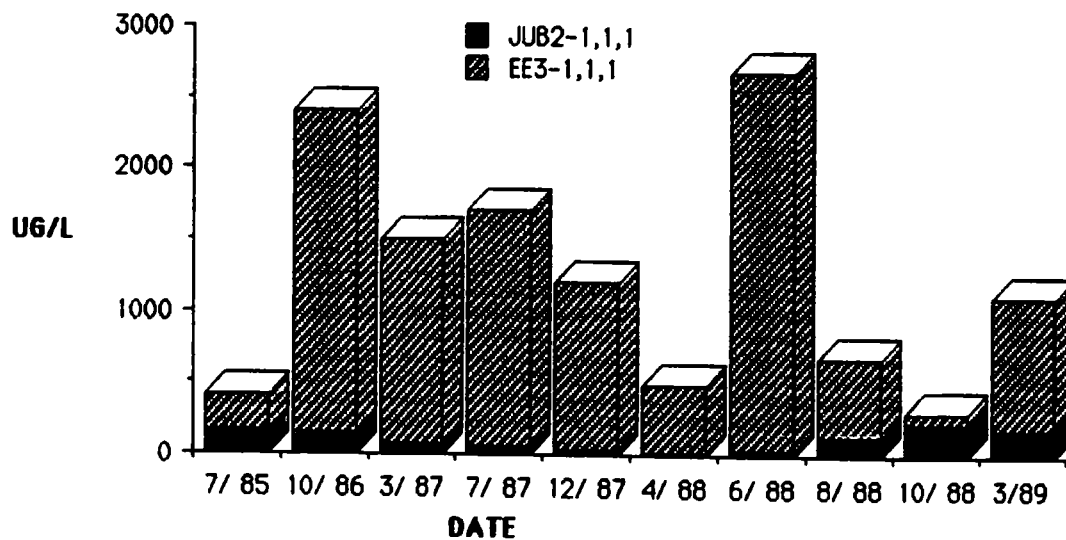
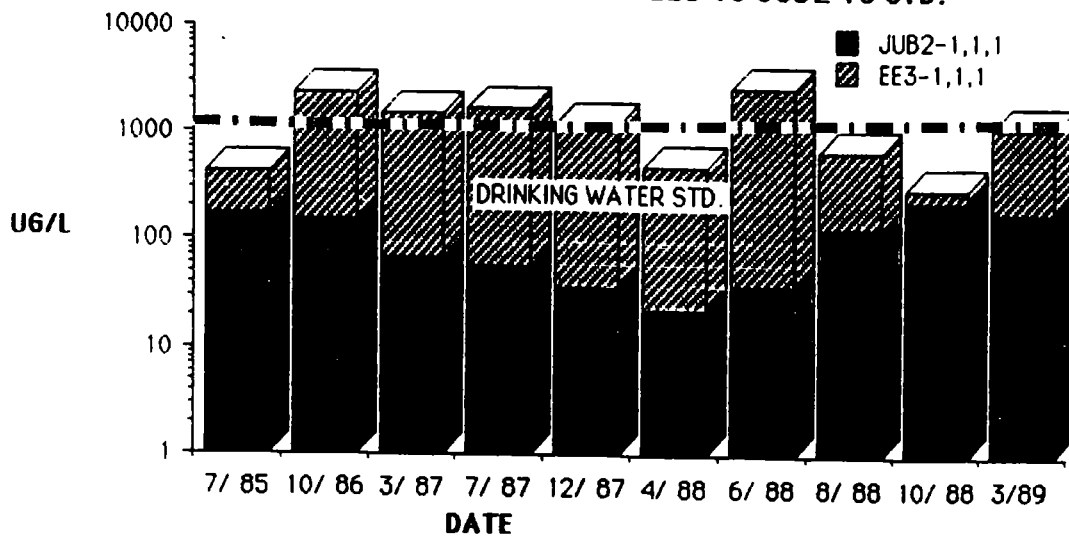
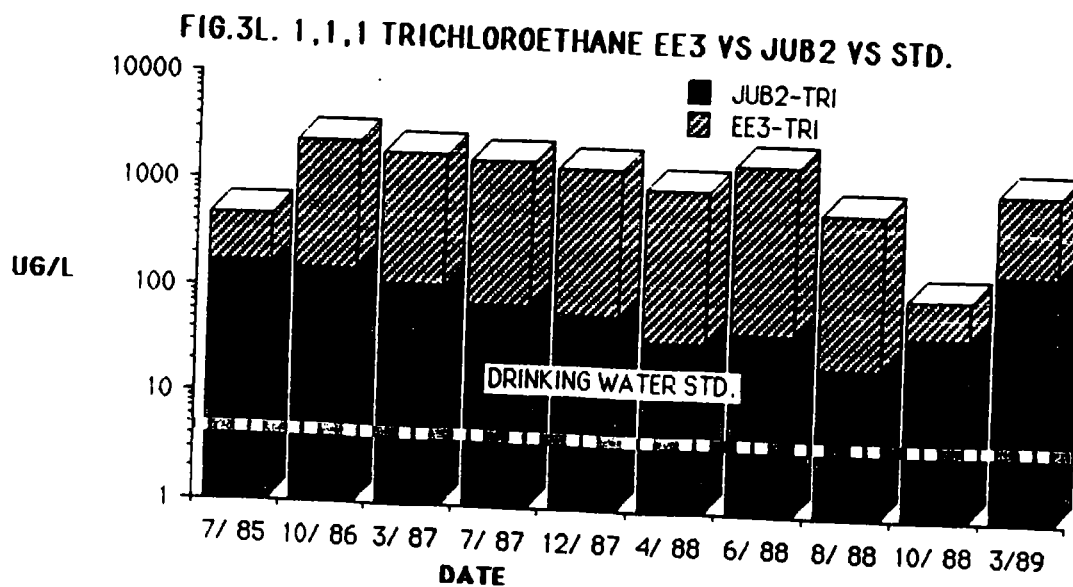
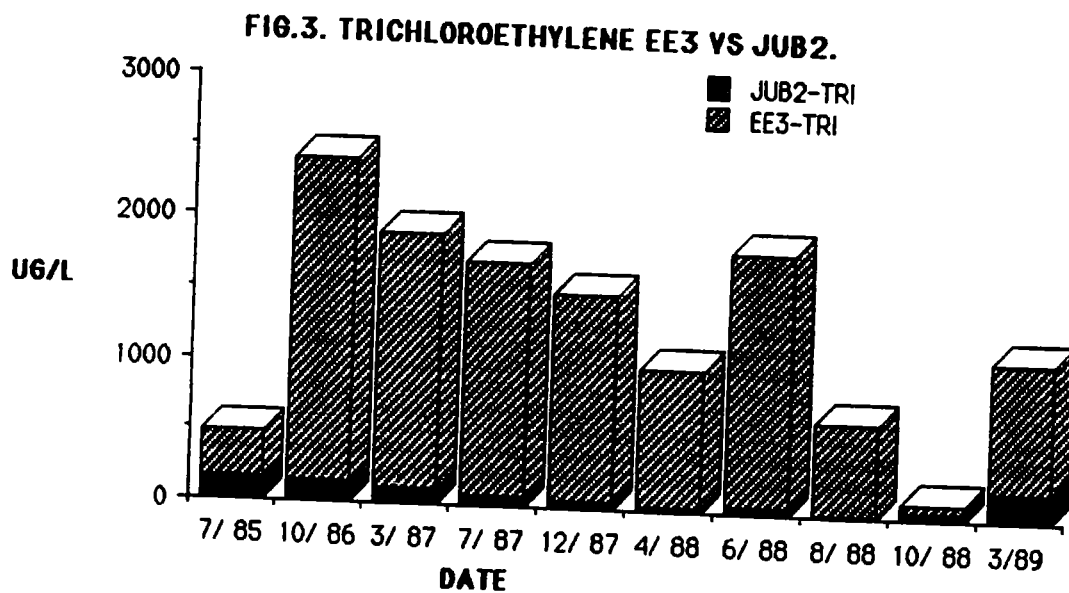
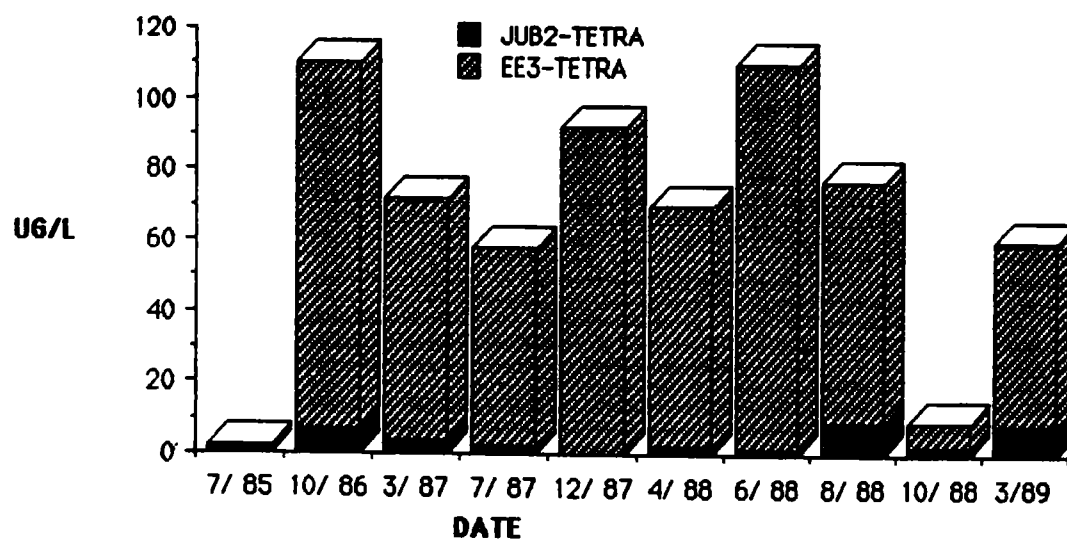


FIG.2L. 1,1,1 TRICHLOROETHANE EE3 VS JUB2 VS STD.

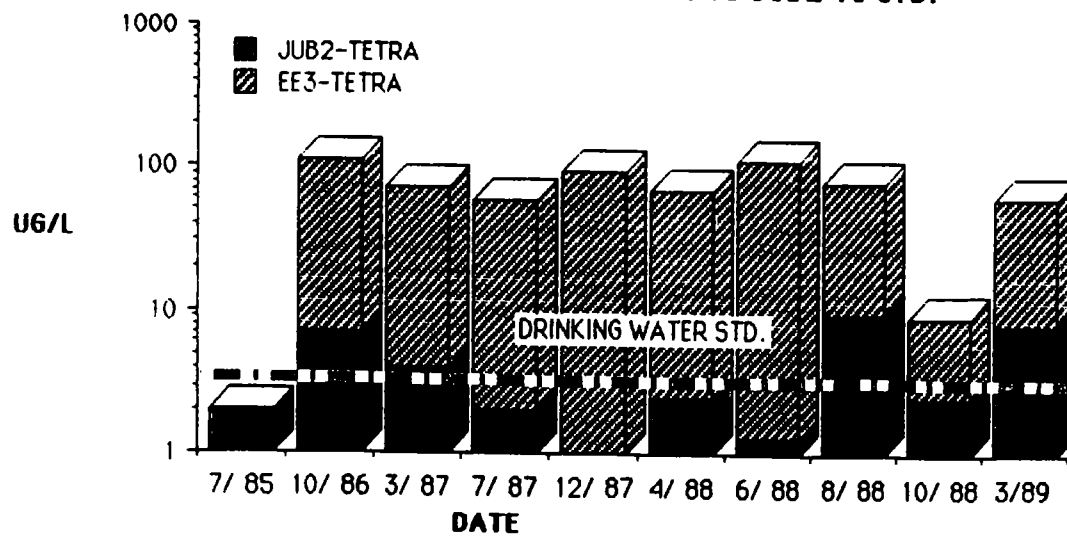




**FIG.4. TETRACHLOROETHYLENE EE3 VS JUB2.**



**FIG.4L. TETRACHLOROETHYLENE EE2 VS JUB2 VS STD.**



Technico & Enviro Services Co.

FILE/2

(509) 7357283

Suite 33

1776 Fowler

Richland, Wa. 99352

December 5, 1988

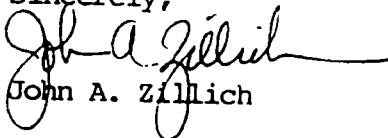
Mr. Cris Matthews  
Solid Waste Coordinator  
Environmental Quality Div.  
Washington Dept. of Ecology  
N. 4601 Monroe Street  
Suite 100  
Spokane, WA 99205-1295

Subject: Groundwater Monitoring Results at the Pasco  
Sanitary Landfill

Dear Mr. Matthews:

This letter provides you with the water quality monitoring results for the fourth quarter of 1988. Wells requiring annual sampling will be sampled before the end of December.

Sincerely,

  
John A. Zillich

JAZ/tg

Enclosure

cc: Larry Dietrich  
Larry Kamberg

PLF FIELD MEAS 10/88

				GROUND WATER					
	SITE: PASCO			ELEVATION DATA SHEET					
	DATE: 10/88								
			MEASURED	TOP OF CASING	DEPTH TO	GROUND WATER	SPEC COND	pH	TEMP C
	WELL NO.	DATE	AT	ELEVATION	WATER	ELEVATION			
	JUB CONTROL	10/26/88	TOP OF PVC	411.6	54.24	357.36	520	7.8	14.4
	JUB 1	10/26/88	TOP OF PVC	417.1	69.97	347.13			
	JUB 2	10/26/88	HOLE IN CAP	408.3	60.81	347.50	590	7.75	17.0
	JUB 3	10/26/88	TOP OF PVC	420.4	74.28	346.12			
	JUB 4	10/26/88	TOP OF PVC	393.7			660	7.4	16.3
	EE 1	10/26/88	TOP OF PIPE	417.2	59.73	357.47			
	EE 2	10/26/88	HOLE IN CAP	418.9	68.73	350.14	650	7.6	16.4
	EE 3	10/26/88	HOLE IN CAP	416.8	67.14	349.63	775	7.05	17.0
	EE 4	10/26/88	TOP OF PIPE	397.6	47.30	350.30			
	EE 5	10/26/88	TOP OF PIPE	407.9	56.07	351.83			
	EE 6	10/26/88	TOP OF PIPE	427.0	73.96	353.04			
	EE 7	10/26/88	TOP OF PIPE	425.6	73.09	352.51			
	EE 8	10/26/88	TOP OF PIPE	428.4	75.52	352.88			

# ALCHEM LABORATORY

250 S. Beechwood Avenue, Suite II  
Boise, Idaho 83709  
(208) 376-2257

## LABORATORY REPORT

TECHNICO-ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

ATTENTION: JOHN ZILLICH  
SOURCE -: D-I BLANK

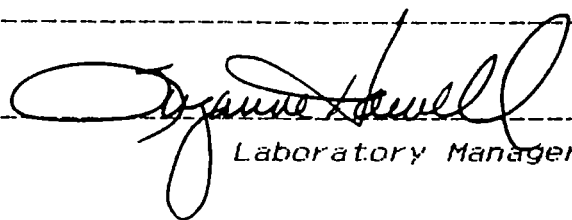
DATE COLLECTED - - -10/27/88  
TIME COLLECTED - - -  
DATE RECEIVED - - - 10/28/88  
DATE REPORTED - - - 11/07/88  
SUBMITTED : JOHN ZILLICH

LAB SAMPLE NUMBER - 5574

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
IRON (DISS.)	0.06	10/31/88	KS
MANGANESE (DISS.)	<0.01	10/31/88	KS
ZINC (DISS.)	0.011	10/31/88	RC

This report is for the exclusive use of the client(s) to whom it is addressed. Its disclosure to others for use in advertising is not authorized. These results refer only to the specific sample tested. Liability is limited to cost of analysis.

  
Laboratory Manager

# ALCHEM LABORATORY

250 S. Beechwood Avenue, Suite II  
Boise, Idaho 83709  
(208) 376-2257

## LABORATORY REPORT

TECHNICO-ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

ATTENTION: JOHN ZILLICH  
SOURCE -: BE 2

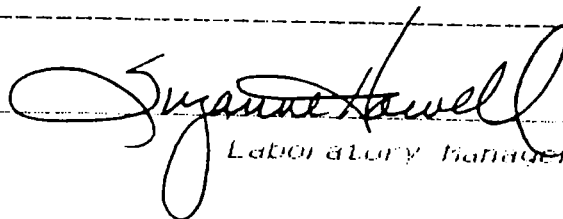
DATE COLLECTED - - -10/27/88  
TIME COLLECTED - - -  
DATE RECEIVED - - - 10/28/88  
DATE REPORTED - - - 11/07/88  
SUBMITTED : JOHN ZILLICH

LAB SAMPLE NUMBER - 5573

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
CHEMICAL OXYGEN DEMAND	9.0	10/31/88	RC
BARIUM	0.10	11/07/88	DM
COPPER	<0.01	10/31/88	SH
IRON	0.08	10/31/88	KS
MANGANESE	<0.01	10/31/88	KS
ZINC	0.001	10/31/88	RC
IRON (DISS.)	<0.01	10/31/88	KS
MANGANESE (DISS.)	<0.01	10/31/88	KS
ZINC (DISS.)	<0.001	10/31/88	RC

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Laboratory Manager

# **ALCHEM LABORATORY**

250 S. Beechwood Avenue, Suite II  
Boise, Idaho 83709  
(208) 376-2257

## **LABORATORY REPORT**

**TECHNICO-ENVIRO SERVICE**  
**1776 FOWLER, SUITE 33**  
**RICHLAND, WASHINGTON 99352**

**ATTENTION: JOHN ZILlich**  
**SOURCE -: JUB 2**

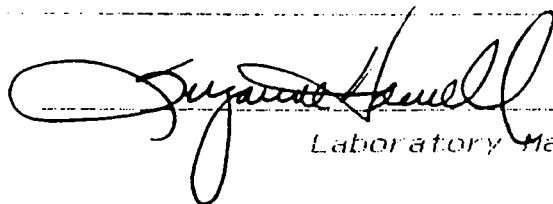
**DATE COLLECTED - - -10/27/88**  
**TIME COLLECTED - - -**  
**DATE RECEIVED - - - 10/28/88**  
**DATE REPORTED - - - 11/07/88**  
**SUBMITTED : JOHN ZILlich**

**LAB SAMPLE NUMBER - 5572**

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
CHEMICAL OXYGEN DEMAND	4.0	10/31/88	RC
BARIUM	<0.10	11/07/88	DM
COPPER	<0.01	10/31/88	SH
IRON	0.05	10/31/88	KS
MANGANESE	<0.01	10/31/88	KS
ZINC	0.001	10/31/88	RC
IRON (DISS.)	0.25	10/31/88	KS
MANGANESE (DISS.)	<0.01	10/31/88	KS
ZINC (DISS.)	0.002	10/31/88	RC

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Laboratory Manager



# ALCHEM LABORATORY

250 S. Beechwood Avenue, Suite II  
Boise, Idaho 83709  
(208) 376-2257

## LABORATORY REPORT

TECHNICO-ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

ATTENTION: JOHN ZILlich  
SOURCE -: JUB CONTROL

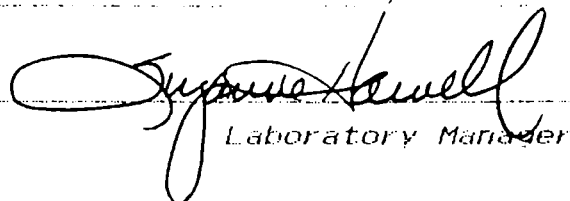
DATE COLLECTED - - -10/27/88  
TIME COLLECTED - - -  
DATE RECEIVED - - - 10/28/88  
DATE REPORTED - - - 11/07/88  
SUBMITTED : JOHN ZILlich

LAB SAMPLE NUMBER - 5571

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
TOTAL COLIFORM	13	10/28/88	KS
CHEMICAL OXYGEN DEMAND	10.0	10/31/88	RC
BARIUM	0.10	11/07/88	DM
COPPER	<0.01	10/31/88	SH
IRON	0.09	10/31/88	KS
MANGANESE	<0.01	10/31/88	KS
ZINC	0.002	10/31/88	RC
IRON (DISS.)	<0.01	10/31/88	KS
MANGANESE (DISS.)	<0.01	10/31/88	KS
ZINC (DISS.)	0.009	10/31/88	RC

This report for the exclusive use of the client(s) to whom it is addressed. Its disclosure to others for use in advertising is not authorized. These results refer only to the specific sample tested. Liability is limited to cost of analysis.

  
Laboratory Manager

# ALCHEM LABORATORY

250 S. Beechwood Avenue, Suite II  
Boise, Idaho 83709  
(208) 376-2257

## LABORATORY REPORT

TECHNICO-ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

ATTENTION: JOHN ZILLICH  
SOURCE -: EE 3

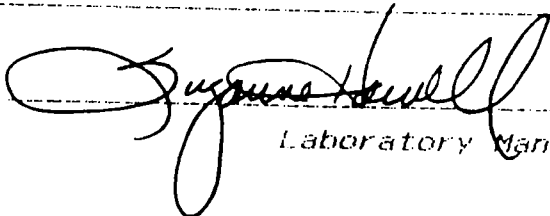
DATE COLLECTED - - -10/27/88  
TIME COLLECTED - - -  
DATE RECEIVED - - - 10/28/88  
DATE REPORTED - - - 11/07/88  
SUBMITTED : JOHN ZILLICH

LAB SAMPLE NUMBER - 5570

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
TOTAL COLIFORM	5	10/28/88	KS
CHEMICAL OXYGEN DEMAND	18.0	10/31/88	RC
BARIUM	0.20	11/07/88	DM
COPPER	<0.01	10/31/88	SH
IRON	12.70	10/31/88	KS
MANGANESE	1.37	10/31/88	KS
ZINC	0.004	10/31/88	RC
IRON (DISS.)	11.64	10/31/88	KS
MANGANESE (DISS.)	1.33	10/31/88	KS
ZINC (DISS.)	0.001	10/31/88	RC

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Laboratory Manager

# ALCHEM LABORATORY

250 S. Beechwood Avenue, Suite II  
Boise, Idaho 83709  
(208) 376-2257

received  
11/9/88

## LABORATORY REPORT

TECHNICO-ENVIRO SERVICE  
1776 FOWLER, SUITE 33  
RICHLAND, WASHINGTON 99352

ATTENTION: JOHN ZILlich  
SOURCE -: JUB 4

DATE COLLECTED - - -10/27/88  
TIME COLLECTED - - -  
DATE RECEIVED - - - 10/28/88  
DATE REPORTED - - - 11/07/88  
SUBMITTED : JOHN ZILlich

LAB SAMPLE NUMBER - 5569

Results reported unless noted: (Chemistry Analysis as mg/l) (Bacteria as organisms/100 ml)

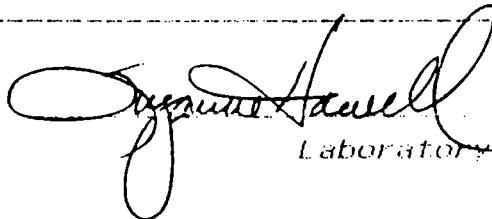
ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
TOTAL COLIFORM	** <1	10/28/88	KS
CHEMICAL OXYGEN DEMAND	7.0	10/31/88	RC
BARIUM	0.20	11/07/88	DM
COPPER	<0.01	10/31/88	SH
IRON	0.06	10/31/88	KS
MANGANESE	<0.01	10/31/88	KS
ZINC	0.003	10/31/88	RC
IRON (DISS.)	<0.01	10/31/88	KS
MANGANESE (DISS.)	<0.01	10/31/88	KS
ZINC (DISS.)	<0.001	10/31/88	RC

COMMENTS: \*\* NO INTESTINAL BACTERIA WERE FOUND ON CULTURE PLATE. \*\*

This report for the exclusive use of the client(s) to whom it is addressed. Its disclosure to others for use in advertising is not authorized. These results refer only to the specific sample analyzed. Liability is limited to cost of analysis.

The Blank has  
been subtracted  
from the Diss  
metals. Please

with Diss metals  
which have been subtracted

  
Laboratory Manager



Burmah Technical Services, Inc.  
Analytical Laboratories Division

15199 Community Road  
P.O. Drawer 2609  
Gulfport, MS 39505

601-863-3036

ANALYTICAL REPORT

Technico & Environmental  
201 West 33rd Avenue  
Kennewick, Washington 99337

ATTENTION: Mr. John Zillich

IDENTIFICATION: Water Samples  
PASCO LANDFILL

DATE SAMPLE RECEIVED: 11/02/88  
MONTH COVERED: November, 1988  
CLIENT NUMBER: TEC200  
SAMPLED BY: Client  
FREQUENCY: As Requested  
DATE: November 23, 1988  
Page 2 of 2

SAMPLE NUMBER:	CLIENT I.D.	TOC		UNITS
09639	JUB Control	18.1	18.7 (Rep)	mg/l
09640	JUB2	15.9		mg/l
09641	JUB4	19.4		mg/l
09642	EE2	N/A		mg/l
09643	EE3	34.1	34.6 (Rep)	mg/l

D. I. Blank - <1.00  
46 mg/l Check Standard - 49.2  
Acceptable Range - 35-57  
Spike Recovery - 97%  
Date Analyzed - 11/3/88  
Analyst - DD

APPROVED BY:

  
KAREN H. BROWN  
LABORATORY MANAGER



Burmah Technical Services, Inc.  
Analytical Laboratories Division

15199 Community Road  
P.O. Drawer 2609  
Gulfport, MS 39505

601-863-3036

ANALYTICAL REPORT

**received**  
12/1/88

Technico & Environmental  
201 West 33rd Avenue  
Kennewick, Washington 99337


ATTENTION: Mr. John Zillich

DATE SAMPLE RECEIVED: 11/02/88  
MONTH COVERED: November, 1988  
CLIENT NUMBER: TEC200  
SAMPLED BY: Client  
FREQUENCY: As Requested  
DATE: November 23, 1988  
Page 1 of 2

IDENTIFICATION: Water Samples  
PASCO LANDFILL

SAMPLE NUMBER:	09639	09640	09641	09642	09643	
CLIENT ID:	JUB CONTROL	JUB2	JUB4	EE2	EE3	UNITS
Vinyl Chloride	<5	<5	N/A	<5	<5	µg/l
1,1-Dichloroethylene	<5	35	N/A	<5	18	µg/l
1,1-Dichloroethane	<5	85	N/A	6	130	µg/l
Chloroform	<5	54	N/A	<5	44	µg/l
1,1,1-Trichloroethane	<5	230	N/A	40	291	µg/l
Trichloroethylene	<5	50	N/A	<5	112	µg/l
Tetrachloroethylene	<5	<5	N/A	<5	9	µg/l
Total Xylenes	<5	14	N/A	<5	85	µg/l

APPROVED BY:

  
KAREN H. BROWN  
LABORATORY MANAGER

## WATER BACTERIOLOGICAL ANALYSIS

SAMPLE COLLECTION: READ INSTRUCTIONS ON BACK OF GOLDENROD COPY  
If instructions are not followed, sample will be rejected.

DATE COLLECTED MONTH DAY YEAR 10/26/88			TIME COLLECTED AM PM 2 PM		COUNTY NAME						
TYPE OF SYSTEM <input type="checkbox"/> PUBLIC <input type="checkbox"/> INDIVIDUAL (serves only 1 residence)			IF PUBLIC SYSTEM, COMPLETE: I.D. No. <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> CIRCLE CLASS 1 2 3 4								

NAME OF SYSTEM

SUB 2 Well

SPECIFIC LOCATION WHERE SAMPLE COLLECTED (e.g. kitchen tap @ school, fire station, fountain)

J B Zweibel, Paces Field

SAMPLE COLLECTED BY: (Name)

Zellner

SOURCE TYPE

☐ SURFACE ☐ WELL ☐ SPRING ☐ PURCHASED ☐ COMBINATION or OTHER

SEND REPORT TO: (Print Full Name, Address and Zip Code)

Richard Zellner  
1776 Fowler  
Richland WASHINGTON

TYPE OF SAMPLE

(Check only one in this column)

- ☐ DRINKING WATER ☐ Chlorinated (Residual: \_\_\_\_\_ Total \_\_\_\_\_ Free)  
check treatment → ☐ Filtered ☐ Untreated or Other \_\_\_\_\_
- ☐ RAW SOURCE WATER
- ☐ NEW CONSTRUCTION or REPAIRS
- ☐ OTHER (Specify) \_\_\_\_\_

COMPLETE IF THIS SAMPLE IS A CHECK SAMPLE

PREVIOUS LAB NO. \_\_\_\_\_

PREVIOUS SAMPLE COLLECTION DATE \_\_\_\_\_

REMARKS:

## LABORATORY RESULTS (FOR LAB USE ONLY)

MPN - COLIFORM 5/5 tubes positive	STD PLATE COUNT _____/ml	SAMPLE NOT TESTED BECAUSE: <input type="checkbox"/> Sample Too Cloudy <input type="checkbox"/> Not in Proper Container <input type="checkbox"/> Insufficient Information Provided—Please Read Instructions on Form
MPN DILUTION _____/100 ml	TEST UNSUITABLE 1. <input type="checkbox"/> Confluent Growth 2. <input type="checkbox"/> TNTC 3. <input type="checkbox"/> Excess Debris 4. <input type="checkbox"/> _____	
MF COLIFORM _____/100 ml		
FECAL COLIFORM <input type="checkbox"/> MPN <input type="checkbox"/> MF _____/100 ml		

FOR DRINKING WATER SAMPLES ONLY, THESE RESULTS ARE:

☐ SATISFACTORY ☒ UNSATISFACTORY

SEE REVERSE SIDE OF GREEN COPY FOR EXPLANATION OF RESULTS

LAB NO. 6203569	DATE, TIME RECEIVED— 10-26-88 4:15	RECEIVED BY DM
DATE REPORTED 10-28-88	LABORATORY:	
REMARKS		

WATER SUPPLIER COPY

## WATER BACTERIOLOGICAL ANALYSIS

SAMPLE COLLECTION: READ INSTRUCTIONS ON BACK OF GOLDENROD COPY  
If instructions are not followed, sample will be rejected.

DATE COLLECTED MONTH DAY YEAR 10/26/88			TIME COLLECTED AM PM 1 PM		COUNTY NAME						
TYPE OF SYSTEM <input type="checkbox"/> PUBLIC <input type="checkbox"/> INDIVIDUAL (serves only 1 residence)			IF PUBLIC SYSTEM, COMPLETE: I.D. No. <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> CIRCLE CLASS 1 2								

NAME OF SYSTEM

FE 3 Well

SPECIFIC LOCATION WHERE SAMPLE COLLECTED (e.g. kitchen tap @ school, fire station, fountain)

FE 3 Well, Paces Field

SAMPLE COLLECTED BY: (Name)

Zellner

SOURCE TYPE

☐ SURFACE ☐ WELL ☐ SPRING ☐ PURCHASED ☐ COMBINATION or OTHER

SEND REPORT TO: (Print Full Name, Address and Zip Code)

Richard Zellner  
1776 Fowler  
Richland WASHINGTON

TYPE OF SAMPLE

(Check only one in this column)

- ☐ DRINKING WATER ☐ Chlorinated (Residual: \_\_\_\_\_ Total \_\_\_\_\_ Fr)  
check treatment → ☐ Filtered ☐ Untreated or Other \_\_\_\_\_
- ☐ RAW SOURCE WATER
- ☐ NEW CONSTRUCTION or REPAIRS
- ☐ OTHER (Specify) \_\_\_\_\_

COMPLETE IF THIS SAMPLE IS A CHECK SAMPLE

PREVIOUS LAB NO. \_\_\_\_\_

PREVIOUS SAMPLE COLLECTION DATE \_\_\_\_\_

REMARKS:

## LABORATORY RESULTS (FOR LAB USE ONLY)

MPN - COLIFORM 5/5 tubes positive	STD PLATE COUNT _____/ml	SAMPLE NOT TESTED BECAUSE: <input type="checkbox"/> Sample Too Cloudy <input type="checkbox"/> Not in Proper Cont. <input type="checkbox"/> Insufficient Information Provided—Please Read Instructions on Form
MPN DILUTION _____/100 ml	TEST UNSUITABLE 1. <input type="checkbox"/> Confluent Growth 2. <input type="checkbox"/> TNTC 3. <input type="checkbox"/> Excess Debris 4. <input type="checkbox"/> _____	
MF COLIFORM _____/100 ml		
FECAL COLIFORM <input type="checkbox"/> MPN <input type="checkbox"/> MF _____/100 ml		

FOR DRINKING WATER SAMPLES ONLY, THESE RESULTS ARE:

☐ SATISFACTORY ☒ UNSATISFACTORY

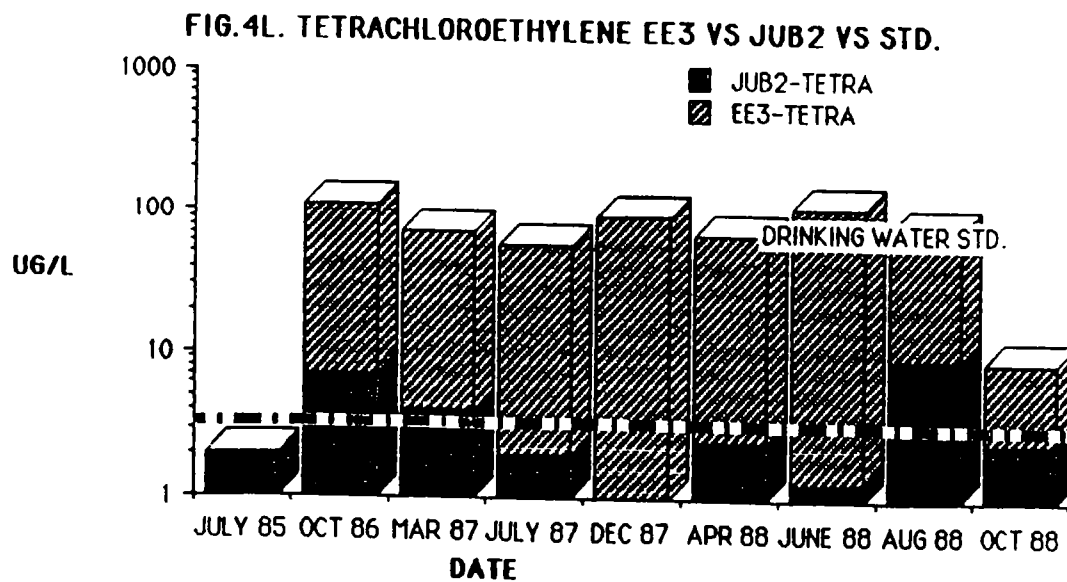
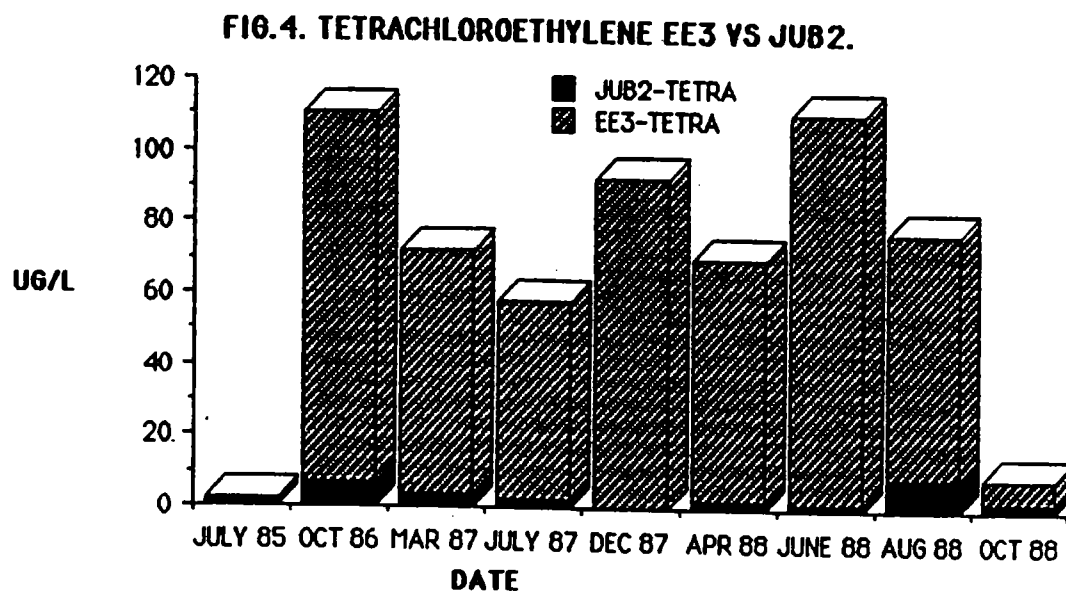
SEE REVERSE SIDE OF GREEN COPY FOR EXPLANATION OF RESULTS

LAB NO. 6203568	DATE, TIME RECEIVED— 10-26-88 4:15	RECEIVED BY DM
DATE REPORTED 10-29-88	LABORATORY:	
REMARKS		

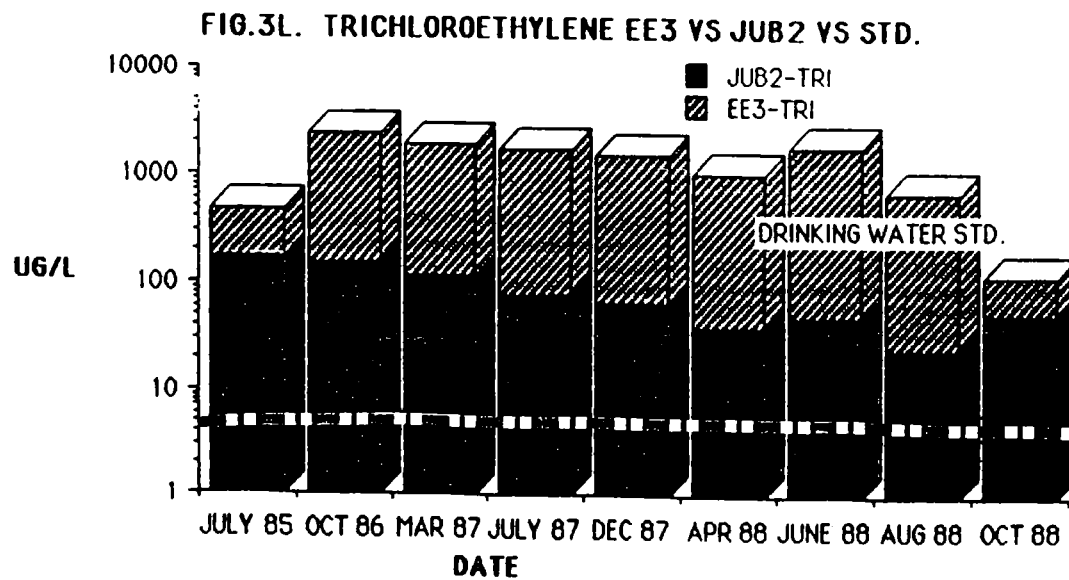
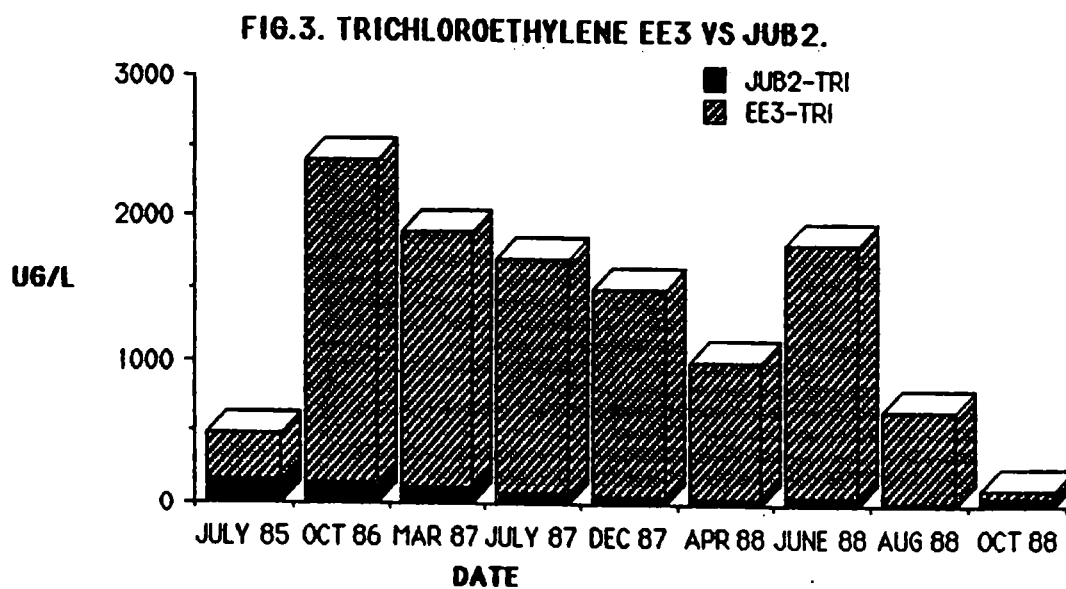
WATER SUPPLIER COPY

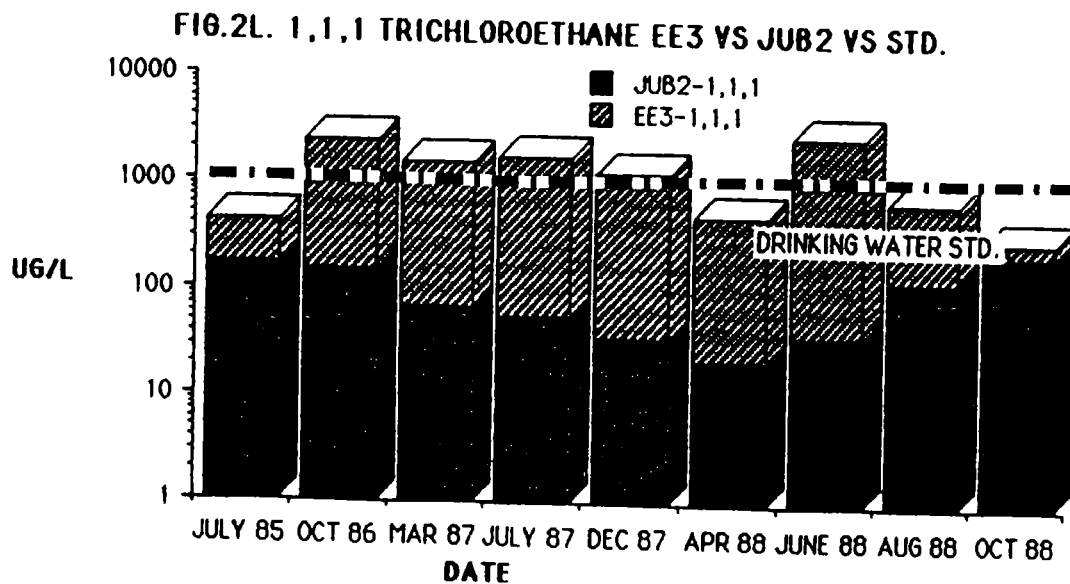
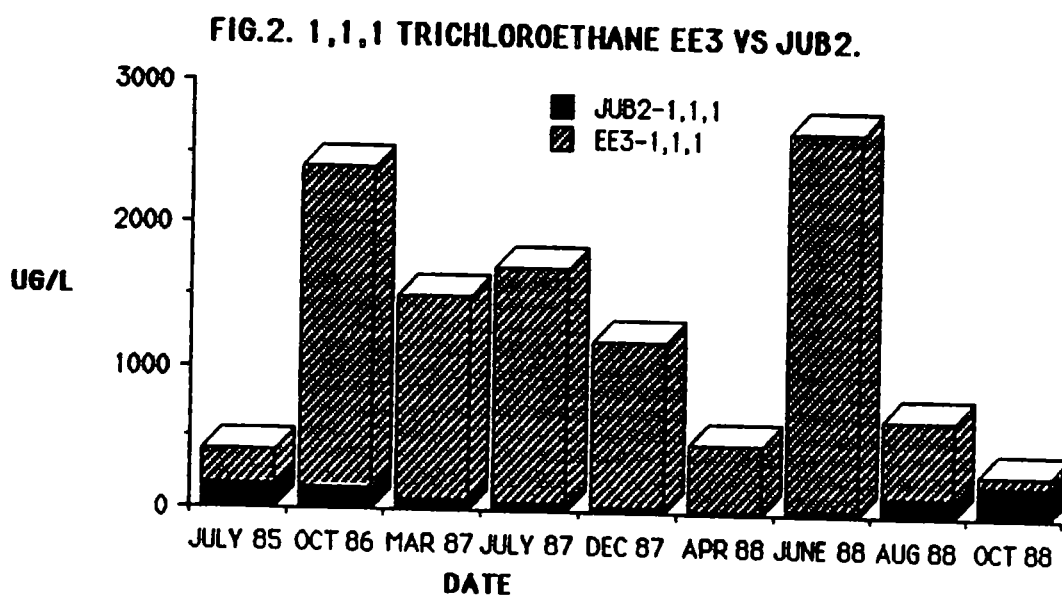
**Results for October Sampling  
at Pasco Sanitary Landfill**

Location	Date	Cl	SO <sub>4</sub>
JUB Control	10/27/88	28	31.6
EE 3	10/26/88	45	20.6
JUB 2	10/26/88	30	34.5
JUB 4	10/27/88	21	31.1









JOB No. 12532 DATE: 10/27/88

Sample No. B1020GVD.WA1

Matrix: Water Analysis: GC-PID

Surrogate  
Compound

Percent  
Recovery

Comment

Control  
Limits

4-Chlorotoluene

100

20 - 150

Sample No. 01

Surrogate  
Compound

Matrix: Water Analysis: GC-PID

Percent  
Recovery

Comment

Control  
Limits

4-Chlorotoluene

88

20 - 150

Sample No. 02@1/2

Surrogate  
Compound

Matrix: Water Analysis: GC-PID

Percent  
Recovery

Comment

Control  
Limits

4-Chlorotoluene

83

20 - 150

JOB No. 12532 DATE: 10/27/88

Sample No. B1020GVD.WA1

Matrix: Water Analysis: GC-HALL

Surrogate  
Compound

Percent Recovery	Comment	Control Limits
---------------------	---------	-------------------

4-Bromofluorobenzene  
4-Chlorotoluene

97		76 - 121
101		20 - 150

Sample No. 01

Matrix: Water Analysis: GC-HALL

Surrogate  
Compound

Percent Recovery	Comment	Control Limits
---------------------	---------	-------------------

Bromochloromethane  
4-Chlorotoluene

78		73 - 125
74		20 - 150

Sample No. 02@1/2

Matrix: Water Analysis: GC-HALL

Surrogate  
Compound

Percent Recovery	Comment	Control Limits
---------------------	---------	-------------------

4-Bromofluorobenzene  
4-Chlorotoluene

78		76 - 121
71		20 - 150

# Laucks <sup>80</sup> years

## Testing Laboratories, Inc.

940 South Harney St., Seattle, WA 98108 (206) 767-5060 FAX 767-5063

## Certificate

Chemistry, Microbiology, and Technical Services

CLIENT: Technico & Environmental Services  
201 West 33rd Avenue  
Kennewick, WA 99336  
ATTN: John Zillich

LABORATORY NO. 12532

DATE: Nov. 10, 1988

REPORT ON: WATER

Project No. 88.4

### SAMPLE

IDENTIFICATION: Submitted 10/07/88 and identified as shown below:

- 1) Pasco Landfill Tippet Spray
- 2) Pasco Landfill Tippet Well Bead

### TESTS PERFORMED AND RESULTS:

	<u>parts per billion (ug/L)</u>		
	<u>1</u>	<u>2#</u>	<u>Method Blank</u>
1,1-Dichloroethylene	<1.0	<2.0	<1.
1,1-Dichloroethane	<1.0	<2.0	<1.
trans-1,2-dichloroethylene	<1.0	<2.0	<1.
Chloroform	<1.0	<2.0	<1.
1,1,1-Trichloroethane	<1.0	<2.0	<1.
Trichloroethylene	<1.0	<2.0	<1.
Toluene	<1.0	<2.0	<1.
Xylene	<1.0	<2.0	<1.
Tetrachloroethylene	2.0	<2.0	<1.
Vinyl Chloride	<10.	<20.	<10.

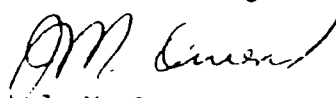
### Key

< indicates "less than"

# Only 5 mls of Sample was purged due to sample foaming.

Respectfully submitted,

Laucks Testing Laboratories, Inc.

  
J. M. Owens

JMO:1aj



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940 South Harney St., Seattle, WA 98108 (206) 767-5060 FAX 767-5063

Chemistry, Microbiology, and Technical Services

Certificate

Technico & Environmental Services

PAGE NO. 2

LABORATORY NO. 12532

## APPENDIX

### Surrogate Recovery Quality Control Report

Attached are surrogate (chemically similar) compounds utilized in the analysis of organic compounds. The surrogates are added to every sample prior to extraction and analysis to monitor for matrix effects, purging efficiency, and sample processing errors. The control limits represent the 95% confidence interval established in our laboratory through repetitive analysis of these sample types.



This report is submitted for the exclusive use of the person, partnership, or corporation to whom it is addressed. Subsequent use of the name of this company or any member of its staff in connection with the advertising or sale of any product or process will be granted only on contract. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.

**APPENDIX B**

**PHOTOGRAPHIC DOCUMENTATION**

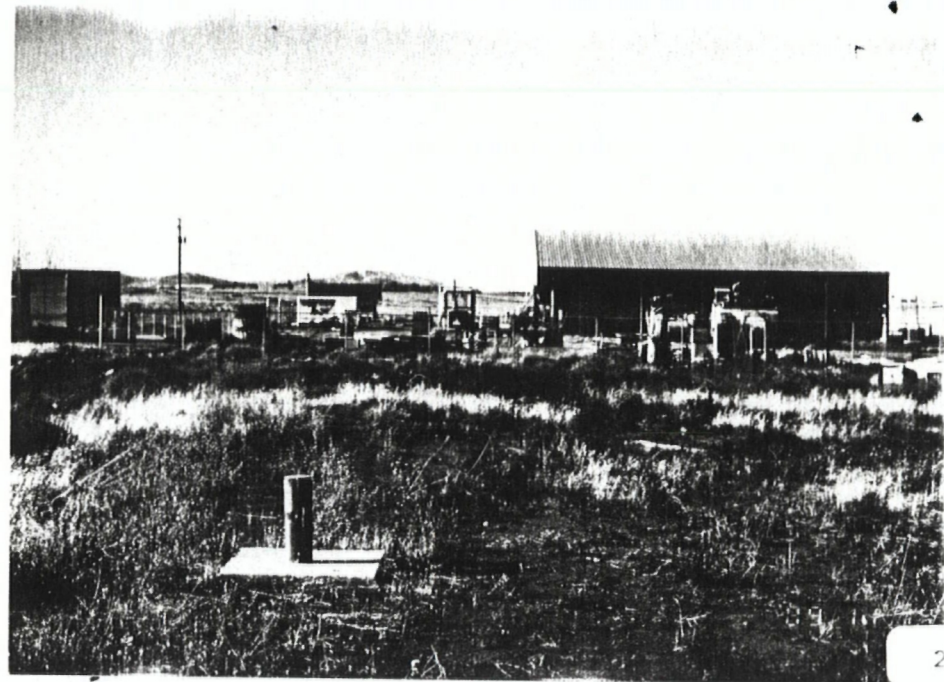
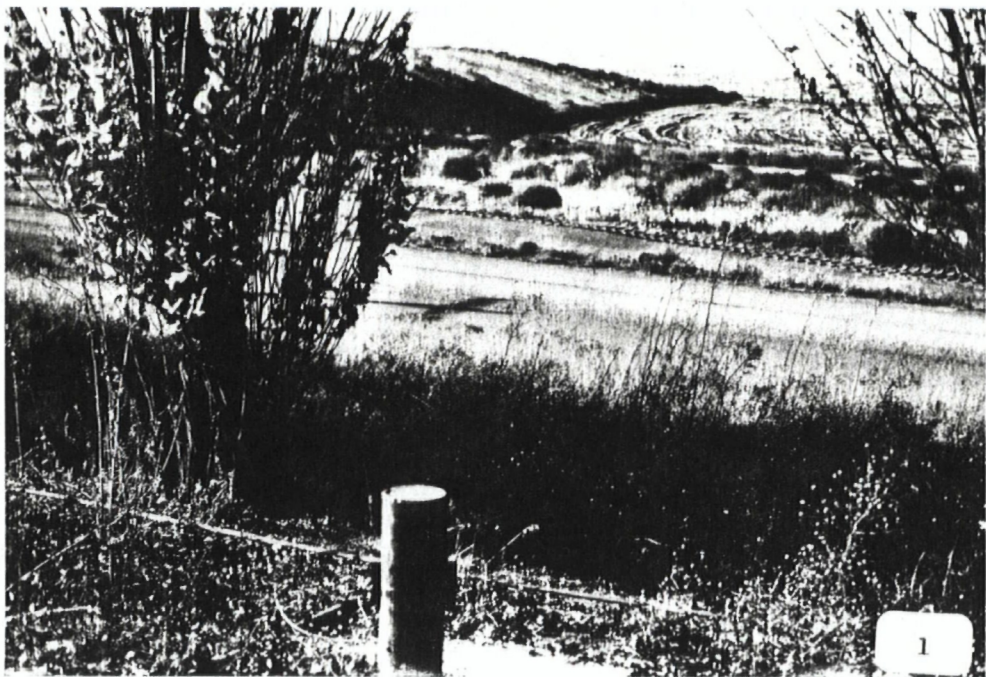
# PHOTOGRAPH IDENTIFICATION SHEET

Camera Serial No.:  
Lense Type: 50 mm

TDD No.: T10-8910-009  
Site Name: Pasco Sanitary Landfill

Photo No.	Date	Time	Taken By	Description
1	11/14/89	1100	P. Witt	EE 3 and JUB 2 in background southwest.
2	11/14/89	1105	P. Witt	EE 6 - West.
3	11/14/89	1110	P. Witt	EE 4 - East.
4	11/14/89	1110	P. Witt	EE 5 - North.
5	11/14/89	1115	P. Witt	EE 7, metal pile - West.
6	11/14/89	1125	P. Witt	Active sanitary landfill area - North.










☐ REMOVAL ACTION☒ SITE ASSESSMENT

		POTENTIAL HAZARDOUS WASTE SITE SITE IDENTIFICATION		I. IDENTIFICATION	
				01 STATE WA	02 SITE NUMBER 0991281874
II. SITE NAME AND LOCATION					
01 SITE NAME (Legal, common, or descriptive name of site) Pasco Sanitary Landfill		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER T9N, R30E Willamette Meridian SW1/4 of Section 15, NW1/4 of Section 22			
03 CITY Pasco	04 STATE WA	05 ZIP CODE	06 COUNTY Franklin	07 COUNTY CODE	08 CONG DIST
09 DIRECTIONS TO SITE (Starting from nearest public road) Go west at intersection of Rt. 12 and Kalhout Rd., approx. one mile on east side of road.					
III. RESPONSIBLE PARTIES					
01 OWNER (If known) Mr. Larry Dietrich		02 STREET (Business, residential, mailing) 420 East Ainsworth			
03 CITY Pasco	04 STATE WA	05 ZIP CODE 99301	06 TELEPHONE NUMBER 509, 735-7283		
07 OPERATOR (If known and different from owner)		08 STREET (Business, residential, mailing)			
09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER ( )		
13 TYPE OF OWNERSHIP (Check one) <input checked="" type="checkbox"/> A. PRIVATE <input type="checkbox"/> B. FEDERAL: _____ (Agency name) <input type="checkbox"/> C. STATE <input type="checkbox"/> D. COUNTY <input type="checkbox"/> E. MUNICIPAL <input type="checkbox"/> F. OTHER: _____ (Specify) <input type="checkbox"/> G. UNKNOWN					
IV. HOW IDENTIFIED					
01 DATE IDENTIFIED ____/____/____ MONTH DAY YEAR	02 IDENTIFIED BY (Check all that apply) <input type="checkbox"/> A. CITIZEN COMPLAINT <input type="checkbox"/> B. INDUSTRY <input type="checkbox"/> C. STATE/LOCAL GOVERNMENT <input type="checkbox"/> D. AERIAL RECONNAISSANCE <input type="checkbox"/> E. RCRA INSPECTION <input type="checkbox"/> F. SURFACE IMPOUNDMENT ASSESSMENT <input type="checkbox"/> G. OTHER EPA IDENTIFICATION <input checked="" type="checkbox"/> H. OTHER <u>Previously Identified</u> (Specify)				
V. SITE CHARACTERIZATION					
01 TYPE OF SITE (Check all that apply) <input type="checkbox"/> A. STORAGE <input type="checkbox"/> B. TREATMENT <input checked="" type="checkbox"/> C. DISPOSAL <input type="checkbox"/> D. UNAUTHORIZED DUMPING <input type="checkbox"/> E. OTHER _____ (Specify)					
02 SUMMARY OF KNOWN PROBLEMS (Provide narrative description) Organic contamination of groundwater on site. Contaminant concentrations are increasing in on-site well.					
03 SUMMARY OF ALLEGED OR POTENTIAL PROBLEMS (Provide narrative description) Extent of groundwater contamination is not defined.					
VI. INFORMATION AVAILABLE FROM					
01 CONTACT		02 OF (Agency/Organization)		03 TELEPHONE NUMBER ( )	
04 PREPARED BY Peter Witt		05 AGENCY E & E	06 ORGANIZATION TAT	07 TELEPHONE NUMBER (206) 624-9537	08 DATE 12/28/89 MONTH DAY YEAR

# POTENTIAL HAZARDOUS WASTE SITE SITE IDENTIFICATION

## General Information

The Potential Hazardous Waste Site, Site Identification form is used to record site location and related information about alleged, potential, or known hazards at the site when the site is initially identified.

## General Instructions

Complete the Site Identification form as completely as possible. Add additional information as it becomes available. Additional information may be added by using another Site Identification form, completing only those items to be added, deleted, or changed. Mark the form clearly, using "A", "D", or "C", to indicate the action to be taken. The Site Source Data Report may be used if only data in the Site Tracking System (STS) are to be altered. Using the report, mark clearly the items to be changed and the action to be taken. Starred items (\*) are required for the site to be added to STS. The system will not accept new sites with incomplete information.

## Detailed Instructions

### I. Identification

- \*I-01 State: Enter the two character alpha FIPS code for the state in which the site is located.
- \*I-02 Site Number: Enter the ten character alphanumeric code for sites which have a Dun and Bradstreet or EPA "user" Dun and Bradstreet number or the ten character numeric GSA identification code for federal sites. Numbers will be obtained through the Superfund coordinators in each Region.

### II. Site Name and Location

- \*II-01 Site Name: Enter the legal, common, or descriptive name of the site.
- \*II-02 Site Street: Enter the street address and number (if appropriate) where the site is located. If the precise street address is inappropriate for this site, enter brief direction identifier, e.g., NW intersection I-295 & US 99; Post Rd, 5 mi W of Rt. 5.
- \*II-03 Site City: Enter the city, town, village, or other municipality in which the site is located. If the site is not located in a municipality, enter the name of the municipality (or place) which is nearest the site or which most easily locates the site.
- \*II-04 Site State: Enter the two character alpha FIPS code for the state in which the site is located. The code must be the same as in item I-01.
- II-05 Site Zip Code: Enter the five character numeric zip code for the postal zone in which the site is located.
- \*II-06 Site County: Enter the name of the county, parish (Louisiana), or borough (Alaska) in which the site is located.
- II-07 County Code: Enter the three character numeric FIPS county code for the county, parish, or borough in which the site is located. (The regional data analyst will furnish this data item.)
- II-08 Site Congressional District: Enter the two character number for the congressional district in which the site is located.
- II-09 Directions to Site: Starting from the nearest public road, provide narrative directions to the site.

### III. Responsible Parties

- III-01 Site Owner: Enter the name of the owner of the site. The site owner is the person, company, or federal, state, municipal or other public or private entity, who currently holds title to the property on which the site is located.

recycled paper

- III-02 Site Owner Address: Enter the current complete business, residential, or mailing address at which the owner of the site can be reached.
- 03
- 04
- 05

- III-06 Site Owner Telephone Number: Enter the area code and local telephone number at which the owner of the site can be reached.

- III-07 Site Operator: If different from Site Owner, enter the name of the operator at the site. The site operator is the person, company, or federal, state, municipal or other public or private entity, who currently, or most recently, is, or was, responsible for operations at the site.

- III-08 Site Operator Address: Enter the current complete business, residential, or mailing address at which the operator of the site can be reached.
- 09
- 10
- 11

- III-12 Site Operator Telephone Number: Enter the area code and local telephone number at which the operator of the site can be reached.

- \*III-13 Type of Ownership: Check the appropriate box to indicate the type of site ownership. If the site is under the jurisdiction of an activity of the federal government, enter the name of the department, agency, or activity. If Other is indicated, specify the type of ownership and name.

### IV. How Identified

- \*IV-01 Date Identified: Enter the date the site was initially identified to EPA or other responsible agency, e.g., a state environmental or health agency.
- IV-02 Identified By: Check the appropriate box(es) to indicate how the site was initially identified to EPA or other responsible agency, e.g., a state agency.

### V. Site Characterization

- V-01 Type of Site: Check all appropriate boxes. If Other is indicated, specify the type.
- V-02 Summary of Known Problems: Provide a brief narrative description of hazardous conditions known to exist at the site.
- V-03 Summary of Alleged or Potential Problems: Provide a brief narrative description of hazardous, or potentially hazardous, conditions said, or claimed, to exist at the site.

### VI. Information Available From

- VI-01 Contact: Enter the name of the individual who can provide information about the site.
- VI-02 Of: If appropriate, enter the name of the public or private agency, firm, or company, and the organization within the agency, firm, or company of the individual named as Contact.
- VI-03 Telephone Number: Enter the area code and local telephone number of the individual named as Contact.
- VI-04 Prepared By: Enter the name of individual who prepared the Site Identification form.
- VI-05 Agency: Enter the name of the Agency where the individual who prepared the form is employed.
- VI-06 Organization: Enter the name of the organization within the Agency.
- VI-07 Telephone Number: Enter the area code and local telephone number of the individual who prepared the Site Identification form.
- VI-08 Date: Enter the date the Site Identification form was prepared.

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